S. Hrg. 98-49

# DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 1984

## HEARINGS

BEFORE THE

## COMMITTEE ON ARMED SERVICES
## UNITED STATES SENATE

NINETY-EIGHTH CONGRESS

FIRST SESSION

ON

## S. 675

AUTHORIZING APPROPRIATIONS FOR FISCAL YEAR 1984 FOR PROCUREMENT, FOR RESEARCH, DEVELOPMENT, TEST, AND EVALUATION, AND FOR OPERATION AND MAINTENANCE, TO PRESCRIBE PERSONNEL STRENGTHS FOR SUCH FISCAL YEAR FOR THE ARMED FORCES AND FOR CIVILIAN PERSONNEL OF THE DEPARTMENT OF DEFENSE, AND FOR OTHER PURPOSES

### PART 1

### U.S. MILITARY POSTURE

**Secretary of Defense Caspar Weinberger**
**Gen. John W. Vessey, Jr., Chairman, Joint Chiefs of Staff**

FEBRUARY 1, 1983

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# CONTENTS

| | Page |
|---|---|
| Weinberger, Hon. Caspar W., Secretary of Defense | 9 |
| Vessey, Gen. John W., Jr., Chairman, Joint Chiefs of Staff | 27 |
| Report of the Secretary of Defense, Caspar W. Weinberger | 131 |
| U.S. military posture for fiscal year 1984 | 431 |
| Index | (i) |

# DEPARTMENT OF DEFENSE AUTHORIZATION FOR APPROPRIATIONS FOR FISCAL YEAR 1984

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## TUESDAY, FEBRUARY 1, 1983

U.S. Senate,
Committee on Armed Services,
*Washington, D.C.*

## U.S. MILITARY POSTURE

The committee met in open session pursuant to notice, at 10:09 a.m., in room SD106, Dirksen Senate Office Building, Senator John Tower (chairman) presiding.

Present: Senators Tower, Thurmond, Goldwater, Warner, Humphrey, Cohen, Jepsen, Quayle, East, Wilson, Jackson, Stennis, Nunn, Hart, Exon, Levin, Kennedy, and Bingaman.

Staff present: James F. McGovern, staff director and chief counsel; James G. Roche, minority staff director; Alan R. Yuspeh, general counsel; Paul C. Besozzi, minority counsel; Brenda K. Hudson, assistant chief clerk; Anthony J. Principi, counsel; Willis D. Smith, deputy staff director and chief scientist for the minority; Ann E. Sauer, special assistant; Gerald D. Strickler, printing and documents clerk; Louis W. Arny III, Michael B. Donley, Robert S. Dotson, Frank J. Gaffney, George K. Johnson, Jr., José E. Martinez, Patrick L. Renehan, Carl M. Smith, and James C. Smith, professional staff members; Judith A. Freedman, research assistant; and Kathleen L. McGuire, staff assistant.

Also present: Dennis P. Sharon, assistant to Senator Goldwater; John Campbell, assistant to Senator Warner; Ron Kelly, assistant to Senator Humphrey; Jim Dykstra, assistant to Senator Cohen; Jon Etherton, assistant to Senator Jepsen; Hank Steenstra, assistant to Senator Quayle; John Roddy, assistant to Senator East; Robert Nichols, assistant to Senator Jackson; Arnold Punaro, assistant to Senator Nunn; Frank Sullivan and Mary Shields, assistants to Senator Stennis; Bill Lind, assistant to Senator Hart; Greg Pallas, assistant to Senator Exon; Peter Lennon, assistant to Senator Levin; Jan Kalicki and Matthew Murray, assistants to Senator Kennedy; Kathleen Callahan, assistant to Senator Bingaman; and Marty Wilson, assistant to Senator Wilson.

[The bill, S. 675 follows:]

[S. 675, 98th Congress, 1st session]

A BILL to authorize appropriations for fiscal year 1984 for the Armed Forces for procurement, for research, development, test, and evaluation, and for operation and maintenance, to prescribe personnel strengths for such fiscal year for the Armed Forces and for civilian employees of the Department of Defense, and for other purposes

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That this Act may be cited as the "Department of Defense Authorization Act, 1984".

## TITLE I—PROCUREMENT

### AUTHORIZATION OF APPROPRIATIONS, ARMY

SEC. 101. Funds are hereby authorized to be appropriated for fiscal year 1984 for procurement of aircraft, missiles, weapons and tracked combat vehicles, and ammunition, and for other procurement for the Army, as follows:

For aircraft, $3,472,100,000.
For missiles, $3,088,500,000.
For weapons and tracked combat vehicles, $4,934,416,000.
For ammunition, $2,334,189,000.
For other procurement, $5,362,870,000.

### AUTHORIZATION OF APPROPRIATIONS, NAVY AND MARINE CORPS

SEC. 102. (a) Funds are hereby authorized to be appropriated for fiscal year 1984 for procurement of aircraft, weapons (including missiles and torpedoes), shipbuilding and conversion, and for other procurement for the Navy, as follows:

For aircraft, $11,127,300,000.
For weapons (including missiles and torpedoes), $4,028,600,000.
For shipbuilding and conversion, $12,698,800,000.
For other procurement, $5,001,838,000.

(b) Funds are hereby authorized to be appropriated for fiscal year 1984 for procurement for the Marine Corps (including missiles, tracked combat vehicles, and other weapons) in the amount of $1,852, 049,000.

### AUTHORIZATION OF APPROPRIATIONS, AIR FORCE

SEC. 103. (a) Funds are hereby authorized to be appropriated for fiscal year 1984 for procurement of aircraft and missiles, and for other procurement for the Air Force, as follows:

For aircraft, $22,707,190,000.
For missiles, $8,570,834,000.
For other procurement, $7,626,302,000.

(b) Of the funds authorized to be appropriated in this section for aircraft for the Air Force, the sum of $112,100,000 is available only for contribution by the United States as its share of the cost for fiscal year 1984 of acquisition by the North Atlantic Treaty Organization of the Airborne Warning and Control System (AWACS).

### AUTHORIZATION OF APPROPRIATIONS, DEFENSE AGENCIES

SEC. 104. (a) Funds are hereby authorized to be appropriated for fiscal year 1984 for procurement by the Defense agencies in the amount of $1,082,791,000.

### AUTHORIZATION OF APPROPRIATIONS, DEFENSE PRODUCTION ACT PURCHASES

SEC. 105. Funds are hereby authorized to be appropriated for fiscal year 1984 for purchases of, or commitments to purchase, metals, minerals, or other materials by the Department of Defense pursuant to section 303 of the Defense Production Act of 1950, as amended (50 U.S.C. App. section 2093) in the amount of $200,000,000.

### CERTAIN AUTHORITY PROVIDED THE SECRETARY OF DEFENSE IN CONNECTION WITH THE NATO AIRBORNE WARNING AND CONTROL SYSTEM (AWACS) PROGRAM

SEC. 106. Effective on October 1, 1983, section 103(a) of the Department of Defense Authorization Act, 1982 (Public Law 97-86; 95 Stat. 1100) is amended by striking out "fiscal year 1983" both places it appears and inserting in lieu thereof "fiscal year 1984".

### SECURE COMMUNICATIONS EQUIPMENT AND A SPECIAL CLASSIFIED PROGRAM

SEC. 107. The Secretary of Defense is authorized to procure secure telephone communication systems, including equipment and related items, during fiscal year 1984 for the Department of Defense and other Government agencies and entities to support a national program to provide secure telephone service. Of the funds authorized to be appropriated pursuant to this title, not more than $60,000,000 may be used to provide secure telephone equipment and related items to the Department of Defense and other Government agencies and entities in support of such a national program. Equipment provided to Government agencies and entities outside the Department of Defense under the authority of this section, and such related services as may be necessary, may be furnished by the Secretary of Defense with or without reimbursement. In addition, of the funds authorized to be appropriated pursuant to this Act, not more than $220,000,000 is authorized for a special classified program.

## TITLE II—RESEARCH, DEVELOPMENT, TEST, AND EVALUATION

### AUTHORIZATION OF APPROPRIATIONS

SEC. 201. (a) Funds are hereby authorized to be appropriated for fiscal year 1984 for the use of the Armed Forces for research, development, test, and evaluation, in amounts as follow:

For the Army, $4,793,674,000.

For the Navy (including the Marine Corps), $8,182,419,000.

For the Air Force, $13,652,273,000.

For the Defense Agencies, $2,996,900,000, of which $56,800,000 is authorized for the activities of the Director of Test and Evaluation, Defense.

(b) In addition to the funds authorized to be appropriated in subsection (a), there are authorized to be appropriated for fiscal year 1984 such additional sums as may be necessary for increases in salary, pay, retirement, and other employee benefits authorized by law for civilian employees of the Department of Defense whose compensation is provided for by funds authorized to be appropriated in subsection (a).

## TITLE III—OPERATION AND MAINTENANCE

SEC. 301. (a) Funds are hereby authorized to be appropriated for fiscal year 1984 for the use of the Armed Forces of the United States and other activities and agencies of the Department of Defense for expenses, not otherwise provided for, for operation and maintenance, in amounts as follow:

For the Army, $17,867,800,000.

For the Navy, $23,225,600,000

For the Marine Corps, $1,575,900,000.

For the Air Force, $18,999,100,000.

For the Defense agencies, $6,871,900,000.

For the Army Reserve, $662,800,000.

For the Naval Reserve, $693,000,000.

For the Marine Corps Reserve, $53,629,000.

For the Air Force Reserve, $815,000,000.

For the Army National Guard, $1,135,000,000.

For the Air National Guard, $1,824,700,000.

For the National Board for the Promotion of Rifle Practice, $899,000.

For Defense Claims, $222,900,000.

For the Court of Military Appeals, $3,372,000.

(b) There are authorized to be appropriated for fiscal year 1984, in addition to the amounts authorized to be appropriated in subsection (a), such sums as may be necessary—

(1) for increases in salary, pay, retirement, and other employee benefits authorized by law for civilian employees of the Department of Defense whose compensation is provided for by funds authorized to be appropriated in subsection (a);

(2) for unbudgeted increases in fuel cost; and

(3) for increases as the result of inflation in the costs of activities authorized by subsection (a).

### AUTHORIZATION OF APPROPRIATIONS FOR ASSISTANCE FOR 1984 GAMES OF THE XXIII OLYMPIAD

SEC. 302. (a) Notwithstanding any other provision of law, the Secretary of Defense is authorized—

(1) to provide logistical support and personnel services to the 1984 Games of the XXIII Olympiad;

(2) to lend and provide equipment in support of the 1984 Games of the XXIII Olympiad; and

(3) to provide such other services in support of the 1984 Games of the XXIII Olympiad as the Secretary may consider advisable.

(b) There is authorized to be appropriated to the Department of Defense for fiscal year 1984 an amount not to exceed $50,000,000 for the purpose of carrying out subsection (a). Except for funds used for pay and nontravel-related allowances for members of the Armed Forces other than members of the Reserve components thereof called or ordered to active duty to provide support for the XXIII Olympiad, no funds may be obligated for such purpose unless specifically appropriated for such purpose. The costs for pay and non-travel-related allowances of members of the Armed Forces, other than members of the Reserve components thereof called or ordered to active duty to provide support for the XXIII Olympiad, may not be charged to appropriations made pursuant to this authorization.

## TITLE IV—ACTIVE FORCES

SEC. 401. The Armed Forces are authorized strengths for active duty personnel as of September 30, 1984, as follows:

(1) The Army, 782,600.
(2) The Navy, 572,200
(3) The Marine Corps, 197,300.
(4) The Air Force, 612,600.

## TITLE V—RESERVE FORCES

### AUTHORIZATION OF AVERAGE STRENGTHS FOR SELECTED RESERVE

SEC. 501. For fiscal year 1984, the Selected Reserve of the Reserve components of the Armed Forces shall be programed to attain average strengths of not less than the following:

(1) The Army National Guard of the United States, 418,400.
(2) The Army Reserve, 270,700.
(3) The Naval Reserve, 112,600.
(4) The Marine Corps Reserve, 40,300.
(5) The Air National Guard of the United States, 103,400.
(6) The Air Force Reserve, 68,600.
(7) The Coast Guard Reserve, 12,000.

(b) The average strength prescribed by subsection (a) for the selected Reserve of any Reserve component shall be proportionately reduced by (1) the total authorized strength of units organized to serve as units of the selected Reserve of such component which are on active duty (other than for training) at any time during the fiscal year, and (2) the total number of individual members not in units organized to serve as units of the selected Reserve of such component who are on active duty (other than for training or for unsatisfactory participation in training) without their consent at any time during the fiscal year. Whenever such units or such individual members are released from active duty during any fiscal year, the average strength prescribed for such fiscal year for the selected Reserve of such Reserve component shall be proportionately increased by the total authorized strength of such units and by the total number of such individual members.

### AUTHORIZATION OF END STRENGTHS FOR RESERVES ON ACTIVE DUTY IN SUPPORT OF THE RESERVES

SEC. 502. Within the average strengths prescribed in section 501, the Reserve components of the Armed Forces are authorized, as of September 30, 1984, the following number of Reserves to be serving on full-time active duty for the purpose of organizing, administering, recruiting, instructing, or training the Reserve components:

(1) The Army National Guard of the United States, 18,630.
(2) The Army Reserve, 10,664.
(3) The Naval Reserve, 13,846.
(4) The Marine Corps Reserve, 801.
(5) The Air National Guard of the United States, 5,915.
(6) The Air Force Reserve, 517.

(b) Upon a determination by the Secretary of Defense that such action is in the national interest, the end strengths prescribed by subsection (a) may be increased by a total of not more than the number equal to two per centum of the total end strengths prescribed.

### INCREASE IN NUMBER OF CERTAIN PERSONNEL AUTHORIZED TO BE ON ACTIVE DUTY IN SUPPORT OF THE RESERVE COMPONENTS

SEC. 503. The columns under the headings "Army", and "Marine Corps", in the table in section 524(a) of title 10, United States Code, are amended to read as follows:

| | "Army | Marine Corps |
|---|---|---|
| ........................................ | 1,577 | 95 |
| ........................................ | 793 | 48 |
| ........................................ | 291 | 23". |

## TITLE VI—CIVILIAN PERSONNEL

### AUTHORIZATION OF END STRENGTH

SEC. 601. (a) The Department of Defense is authorized a strength in civilian personnel, as of September 30, 1984, of 1,072,174.

(b) The strength for civilian personnel prescribed in subsection (a) shall be apportioned among the Department of the Army, the Department of the Navy, the Department of the Air Force, and the agencies of the Department of Defense (other than the military departments) in such numbers as the Secretary of Defense shall prescribe. The Secretary of Defense shall report to the Congress within sixty days after the date of enactment of this Act on the manner in which the initial allocation of civilian personnel is made among the military departments and the agencies of the Department of Defense (other than the military departments) and shall include the rationale for each allocation.

(c)(1) In computing the strength for civilian personnel, there shall be included all direct-hire and indirect-hire civilian personnel employed to perform military functions administered by the Department of Defense (other than those performed by the National Security Agency) whether employed on a full-time, part-time, or intermittent basis, but excluding special employment categories for students and disadvantaged youth such as the stay-in-school campaign, the temporary summer aid program, the Federal junior fellowship program, and personnel participating in the worker-trainee opportunity program.

(2) Personnel employed under a part-time career employment program established by section 3402 of title 5, United States Code, shall be counted as prescribed in section 3404 of that title. Personnel employed in an overseas area on a part-time basis under a nonpermanent local-hire appointment who are dependents accompanying a Federal civilian employee or a member of a uniformed service on official assignment or tour of duty shall also be counted as prescribed by section 3404 of that title.

(3) Whenever a function, power or duty, or activity is transferred or assigned to a department or agency of the Department of Defense from a department or agency outside of the Department of Defense, or from another department or agency within the Department of Defense, the civilian personnel end-strength authorized for such departments or agencies of the Department of Defense affected shall be adjusted to reflect any increases or decreases in civilian personnel required as a result of such transfer or assignment.

(d) When the Secretary of Defense determines that such action is necessary in the national interest, the Secretary of Defense may authorize the employment of civilian personnel in excess of the number authorized by subsection (a), but such additional number may not exceed 2 percent of the total number of civilian personnel authorized for the Department of Defense by subsection (a). The Secretary of Defense shall promptly notify the Congress of any authorization to increase civilian personnel strength under this subsection.

## TITLE VII—MILITARY TRAINING STUDENT LOADS

### AUTHORIZATION OF TRAINING STUDENT LOADS

Sec. 701. (a) For fiscal year 1984, the components of the Armed Forces are authorized average military training student loads, as follows:

(1) The Army, 71,817.
(2) The Navy, 66,911.
(3) The Marine Corps, 21,105.
(4) The Air Force, 49,007.
(5) The Army National Guard of the United States, 21,105.
(6) The Army Reserve, 12,724.
(7) The Naval Reserve, 2,886.
(8) The Marine Corps Reserve, 3,223.
(9) The Air National Guard of the United States, 2,845.
(10) The Air Force Reserve, 1,705.

(b) The average military student loads for the Army, the Navy, the Marine Corps, and the Air Force and the Reserve components authorized in subsection (a) for fiscal year 1984 shall be adjusted consistent with the manpower strengths authorized in titles IV, V, and VI of this Act. Such adjustment shall be apportioned among the Army, the Navy, the Marine Corps, and the Air Force and the Reserve components in such manner as the Secretary of Defense shall prescribe.

## TITLE VIII—GENERAL PROVISIONS

### REPEAL OF PROHIBITION AGAINST CONSOLIDATING FUNCTIONS OF THE MILITARY TRANSPORTATION COMMANDS

Sec. 801. Section 1110 of the Department of Defense Authorization Act, 1983 (Public Law 97-252; 96 Stat. 747), is repealed.

### AUTHORIZATION TO PROVIDE RECIPROCAL COMMUNICATIONS SUPPORT OR RELATED SUPPLIES AND SERVICES

Sec. 802. (a) Chapter 147 of title 10, United States Code, is amended by inserting after section 2482, the following new section:

**"§ 2483. Reciprocal communications support or related supplies and services**

"The Secretary of Defense may, subject to the concurrence of the Secretary of State, enter into agreements with the Government of any friendly foreign country or international organization under which the United States agrees to provide communications support or related supplies and services to such country or international organization in return for the reciprocal provision of an equivalent value of communications support or related supplies and services by such country or international organization.".

(b) The table of sections at the beginning of such chapter is amended by inserting after the item relating to section 2482 the following new item:

"2483. Reciprocal communications support and related supplies and services.".

## OPENING STATEMENT BY SENATOR JOHN TOWER, CHAIRMAN

Chairman Tower. The committee will come to order.

The committee convenes this morning in what I am convinced is an historic time in our Nation. There have been periods in our past when we have underestimated the capacity and intentions of our potential adversaries. We did this before World War I and World War II, and when the smoke cleared from Europe and the Pacific we committed ourselves to never again fail to have a national defense capacity which would deter any kind of international adventurism.

The price that we have paid to build the most modern and most capable and most ready Armed Forces has been a substantial price. There have been times since World War II in the national consensus, to pay that price has dwindled. This happened during the 1970's, but we must never forget that we have adversaries in today's world with political and economic systems that are different than ours and those are systems which can compel individuals to pay any price that their leaders may dictate.

This morning we are convened to discuss the price of our national defenses, but really we are here to talk about the price of preserving our freedom and whether or not we have the will as a Nation to pay that price voluntarily.

I say that this is an historic time. It is historic because the last 2 years of the Reagan administration has seen a new commitment by our Nation to achieve the military capability that addresses any threat which we may face. But there are some now who question whether Americans still are resolved to do this. There are some Senators who believe that we cannot make adjustments in domestic spending unless we make symbolic reductions in defense spending even if this compromises our national security.

I am certain that no American would require that we compromise the protection of his freedom simply because we try to meet budget constraints elsewhere. Now is the time to demonstrate that our will as a people to remain strong does not depend on whether the deficit is high or low. It does depend on whether we must make sacrifices at home. We must show the world that our willingness to meet any international threat to our security is not negotiable.

I believe that many in the Congress are caught up in an irrational frenzy and are making defense decisions based on what they perceive to be the popular whim of the moment. The practical effect may be to prolong the risks associated with the current military imbalance.

As each Senator this year considers the appropriate level of spending for national security he must remember the historical international responsibilities and commitments which our country has undertaken. These commitments, together with the military capability of our adversaries, determines the size and composition of our Armed Forces. If we are to reduce the amount of Federal resources we commit to national defense, then we must reduce the commitments we are prepared to undertake.

We should be thankful that in the face of a deluge of short sighted and politically motivated advice the President and his Secretary of Defense have demonstrated great leadership by not turning their backs on a primary constitutional responsibility, which is insuring the security of the American people.

These men know, particularly in Washington, that popularity can easily be had through compromise, but that compromises do not always produce sound policy, particular on matters of foreign policy and national security.

I would be concerned about the future of our country if any responsible official or Member of Congress were to fear for his political life because he voted to restore the military balance.

Finally, I would like my colleagues to know that my concern and skepticism about the motives surrounding impending congressional action on the defense budget are supported by my long experience in the defense budget process. It has never ceased to amaze me that the same Senators who stand on the floor and argue against increases for defense are just as likely to call me aside and ask my personal support for projects or programs of interest in their

States. Let's face it, gentlemen, there is some congressional pork in virtually every defense bill we have passed.

Now, never in my 22 years in the Senate have I received a recommendation from any Member for a reduction in defense spending from a program or facility located in his own State. But perhaps that is because I have never asked. Today I am asking. Since many of my colleagues are calling for a reduction in defense spending beyond those recently offered by the President, I in turn have this morning sent a letter to my colleagues asking that each of them submit a list to me no later than March 1 of defense programs or facilities located in their respective States for which in their view reductions could be made without adversely affecting national security, and I trust this will stimulate some hard thinking about defense spending and perhaps result in some economies this committee has not previously considered.

Whatever the outcome of this year's defense budget debate may be, I am determined that we should not lose sight of the costly mistakes of the past, nor must we shrink from the foreign policy challenge ahead.

I am very pleased today to welcome Secretary Weinberger and General Vessey, but first I would like to welcome publicly to the committee four new Members, Senator Kennedy of Massachusetts, Senator Bingaman of New Mexico, Senator East of North Carolina, and Senator Wilson of California. We are delighted to have you aboard, gentlemen. We know that you will make a substantial and productive contribution to the work of this committee.

At this point I would like to also recognize the fact that we have a new ranking member this year, a man with whom I have worked for many years on defense issues and a man whose expertise and whose good judgment I have come to respect over the years. I am delighted to recognize at this point and, incidentally, to recommend at this point the ranking minority member of the committee, the right Honorable Senator Jackson.

Senator **JACKSON**. Thank you, Mr. Chairman.

I do not have a formal statement and I shall be very brief. We are meeting here today at an historic time, as the chairman has pointed out. We are meeting at a time, too, of changing moods. In 1980–81 the country called for a very large defense buildup. Then we have had the intervention of a massive recession which immediately has focused on the issue of where do you cut in order to bring about a reduction in those massive deficits that have gone hand in hand with the massive recession.

The only observation, Mr. Chairman, that I can make at this point is that I hope that the committee, all of us without regard to party, will carefully analyze what our national security requirements are unemotionally, logically, and I hope sensibly.

Clearly, Mr. Chairman, our security, our survival comes first, but there cannot be, in my view, a massive change based solely on the subject of the economy. Clearly there are opportunities to save and from every quarter we are going to be called upon to make reductions and I hope we can make some very substantial reductions if those reductions are based on a logical premise in which we will not endanger our security and those alined with us.

Finally, I would hope, Mr. Chairman, that this would be a time of steadiness, a time when we go about our work in a manner and in a way which will demonstrate to the world that we can provide a very strong and steady hand in a very unsteady world. I think that is the challenge that we all face because the world looks to this country with only 7 percent of its population and the world expects at times bigger things than we are capable of providing, but above all else I think we need to provide a steadiness, not only in reality, but in appearance that will give confidence to others.

So I am pleased to be here this morning to hear the Secretary of Defense and Chairman of the Joint Chiefs as we will be doing more than once, Mr. Chairman, during the course of our deliberations in trying to see if we cannot do the almost impossible task of making adjustments that don't run counter to the fundamental security requirements of the Nation.

Chairman TOWER. Thank you, Senator Jackson.

Mr. Secretary, would you proceed to present your statement. I know that you have a lengthy presentation. You, I am sure, will want to summarize that, and it will be printed in full in the record. After you have completed your statement we will hear from General Vessey. Then we will proceed to questions by members of the committee.

Mr. Secretary.

## STATEMENT OF HON. CASPAR W. WEINBERGER, SECRETARY OF DEFENSE

Secretary WEINBERGER. Thank you very much, Mr. Chairman and members of the committee.

I particularly appreciated your very fine opening statement in which you captured, as you always do, the real essence of the situation and it is very nice also for us to have the opportunity to appear before Senator Jackson in this his first appearance as ranking minority member of the committee.

I do have the formal statement and the annual report, both of which have been submitted, and I appreciate the fact that the full statement will be put in the record. I am not going to try to summarize it at this time, but I would like to describe briefly how we organized the annual report and bring out a few key points that we must consider together this year.

[For the report of Secretary of Defense Caspar W. Weinberger to the Congress on the fiscal year 1984 budget, fiscal year 1985 authorization request and fiscal year 1984–88 defense programs, as of January 31, 1983, see p. 131.]

I would like to say at the outset, however, Mr. Chairman, that we deeply appreciate your support, Congress support, and indeed Congress lead in rebuilding our defenses. It was Congress that initially set the pace by appropriating funds above President Carter's budget request for fiscal year 1981, and it is Congress that has made it possible for President Reagan to restore the basic readiness of our forces as they are now restored and also to begin our long-term defense modernization program.

I know that members of this committee in particular have long been very deeply concerned about the dangerous shift in the military balance. I think I can speak for the Nation and certainly for our administration in thanking you very much for the leadership you have provided.

Our 1984 budget request is really only the final step in a long process that involves making up the defense program. Long before we put numbers to programs in the budget we determined the nature and extent of the threat to our vital national security interests and we developed a strategy to try to meet those threats. We decided what capabilities we would need in this particular year, which is a segment of the President's continuing 5-year plan to put that strategy into effect within the constraints of our resources. That is how the administration and the Defense Department have gone about trying to determine these long-term defense plans, and that is how we have structured the annual report.

The first section of that report is the policy section. It begins by outlining our basic foreign policy goals and the national security objectives that are necessary to achieve those goals. Then the report goes on to describe the military threats to those goals that come particularly from the Soviet Union.

Our strategy for meeting this rapidly growing threat, like the strategy of preceding administrations, is based on three basic principles.

Our strategy is defensive. The United States does not start fights, which means of course that we cede to our potential adversaries the advantage of surprise and the opportunity to pick the time and place of conflict. From that flows the fact that our forces must be maintained in a high state of readiness and that our command, control and communication, and intelligence capabilities must be flexible and enduring, and that we must have the capability to mobilize very rapidly.

Second, our strategy is to deter war, and for this we need a strong and survivable nuclear and conventional force posture designed to convince any potential adversary that the cost of aggression would be too high to justify an attack. That, of course is the essence of deterrence, and it is a policy that has been followed by administrations for at least the last 4 years.

Third, should deterrence fail, then our strategy is to restore peace on favorable terms at the lowest possible level of conflict as soon as possible. For this we need mobile and flexible and sustainable forces with capabilities that can counter the forces that would be deployed against us.

Once we have formulated our defense policy with an honest look at the threats that we face, then we must budget to carry out that policy with an honest look at our available resources.

So part II of the annual defense report reviews not only the fiscal resources, but defense manpower and our industrial base and what might be called our entrepreneurial resources, our ability to spend the taxpayers' dollars efficiently to achieve the goal.

Part III of the annual report describes the programs that we are requesting in our 1984 defense budget of $274.1 billion in total obligational authority. I am not going to try to list those programs now, but I know we will be reviewing them carefully together in the months to come.

I would like instead just to make a few points that we consider very important about our program, Mr. Chairman.

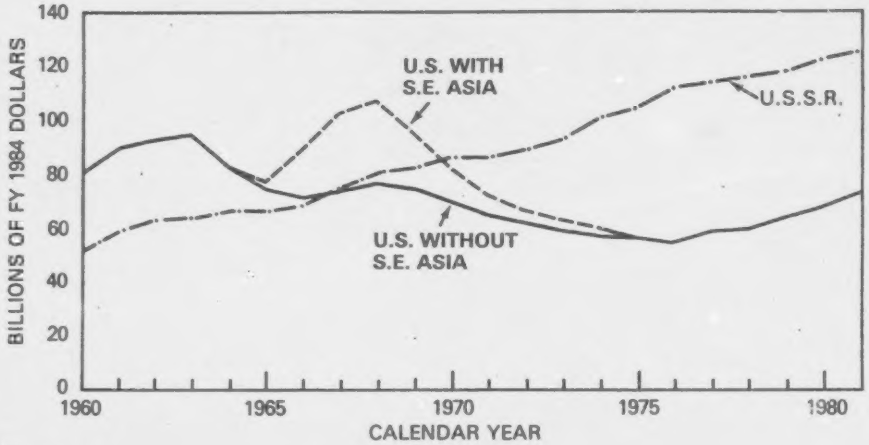
I believe most important of all that we have to develop a responsible and a balanced understanding of the threat we face. We do not have the option of making up the defense budget in a vacuum or, as you indicated, only looking at economic or other conditions or what might be fair to some other programs. We have to do it on the basis of the needs that derive from the threat we face in a world we did not make.

The Soviet Union poses, and for the foreseeable future will continue to pose the most formidable threat to the United States and our interests. Now, of course, there are threats that arise independently of the Soviet Union, but more often than not, their magnitude and their persistence and our difficulties in countering them, are greatly aggravated by Soviet policies backed by the expanding reach of Soviet military power.

A 20-year steady buildup of the Soviet military, coupled with the collective failure of the United States and our allies to make sufficient response, has resulted in a dangerous shift in the global military balance. This shift has occurred because the Soviet Union has outspent and outproduced the United States for at least a decade.

Chart 1

**U.S. AND SOVIET MILITARY INVESTMENT TRENDS**



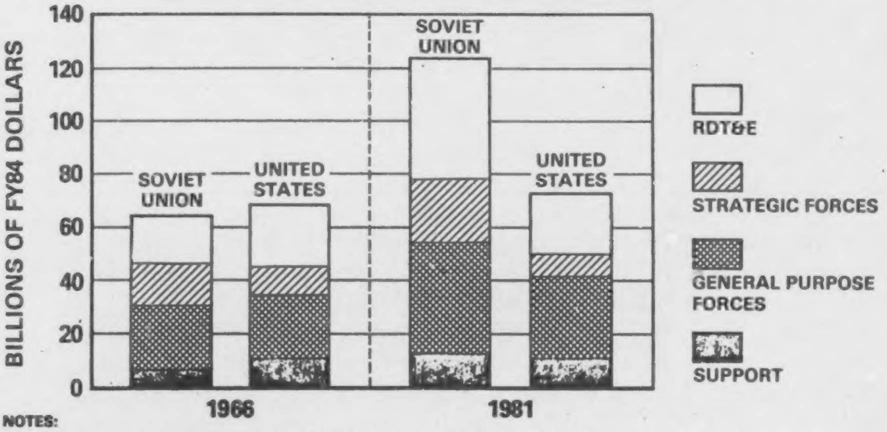
**Notes:**

- Investment Comprises Outlays for Procurement, Military Construction, and RDT&E
- U.S.S.R. Investment Is an Estimate of What It Would Cost the U.S. to Duplicate Soviet Investment Activities
- SEA: Southeast Asea (Vietnam War-Related) Investments

Our first chart here shows that total Soviet and United States military investment capabilities, that is, the production of weapons, other equipment, construction of military facilities, and research and development. Theirs was nearly double ours by the early 1980's. With the 1984 defense budget we mean to close that gap, and the blue and the red lines will narrow as the chart extends out to the right. It will not close, but it will narrow.

Chart 2

**U.S. AND SOVIET MILITARY INVESTMENT BY MISSION AREA**



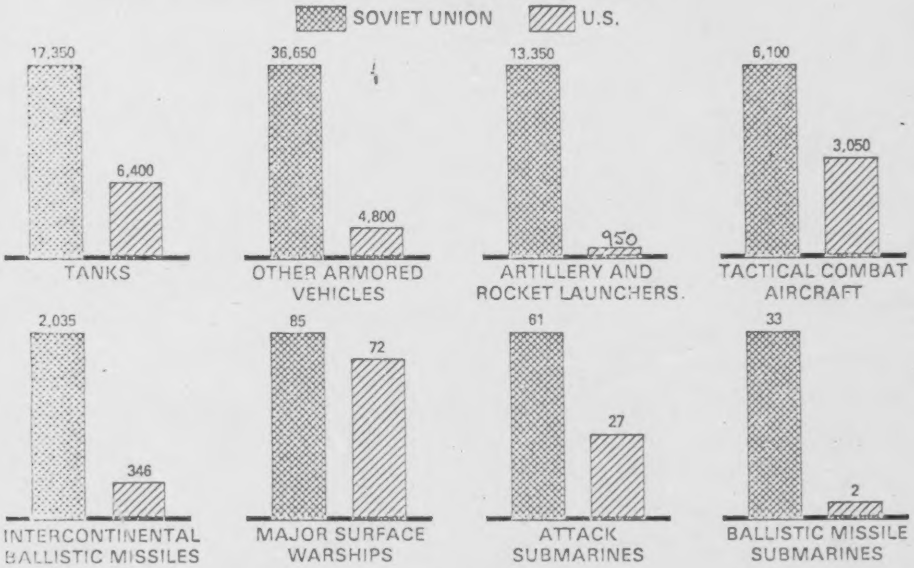
NOTES:

- MISSION AREA TOTALS INCLUDE OUTLAYS FOR PROCUREMENT AND MILITARY CONSTRUCTION
- RDT&E IS FOR ALL MISSION AREAS
- U.S. INVESTMENTS FOR THE VIETNAM WAR ARE EXCLUDED
- SOVIET INVESTMENT IS AN ESTIMATE OF WHAT IT WOULD COST THE U.S.
- TO DUPLICATE SOVIET INVESTMENT ACTIVITIES

On our second chart we have the aggregate comparison that we just saw broken into its component parts. This chart shows that during 1980-81 fiscal year the Soviet investment in strategic nuclear forces was about three times higher than ours. Investment for general purposes was about 50 percent higher, and investment in research and development was about twice our rate. That is in stark contrast to the situation on the left of the chart which was 15 years ago.

Chart 3

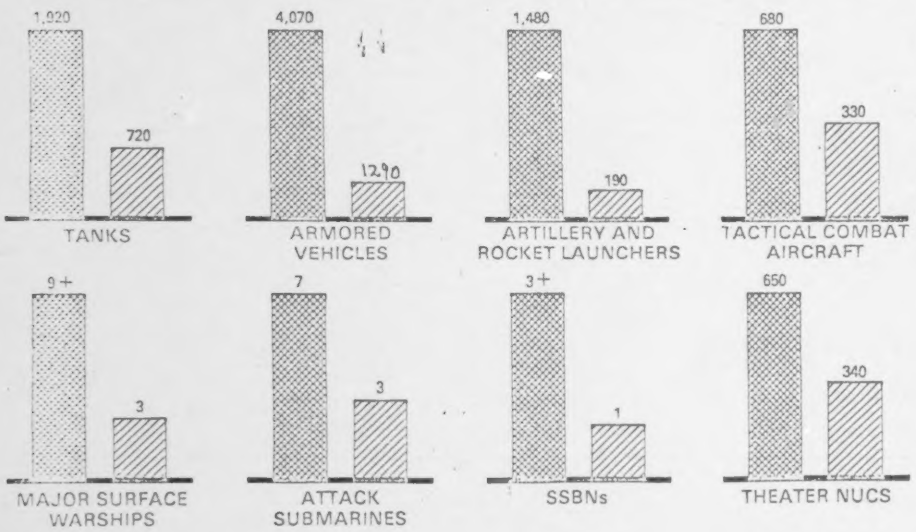
## PRODUCTION OF SELECTED WEAPONS
## 1974 - 82



The next chart shows the weapons production, the actual production of weapons they obtained for that investment during the period 1974 to 1982. That is much more important than their input. That is the tanks, the planes, the ships, the missiles, and the other military hardware which the investment is buying. As the chart shows, since 1974 the Soviet Union has outproduced the United States in tanks by a ratio of 3 to 1 and in other types of armored vehicles by a ratio of about 8 to 1. They have also built about six times more ICBM's and about twice as many combat aircraft. The ICBM's are of an increasingly modern design and a new generation type of equipment. They deployed their fifth generation of missiles many years ago while we have only deployed a third. They are working on the sixth and developing even more modern hardware as they proceed in their various research facilities.

Chart 4

## A COMPARISON OF AVERAGE ANNUAL SOVIET PRODUCTION AND FY 1984 U.S. REQUESTS



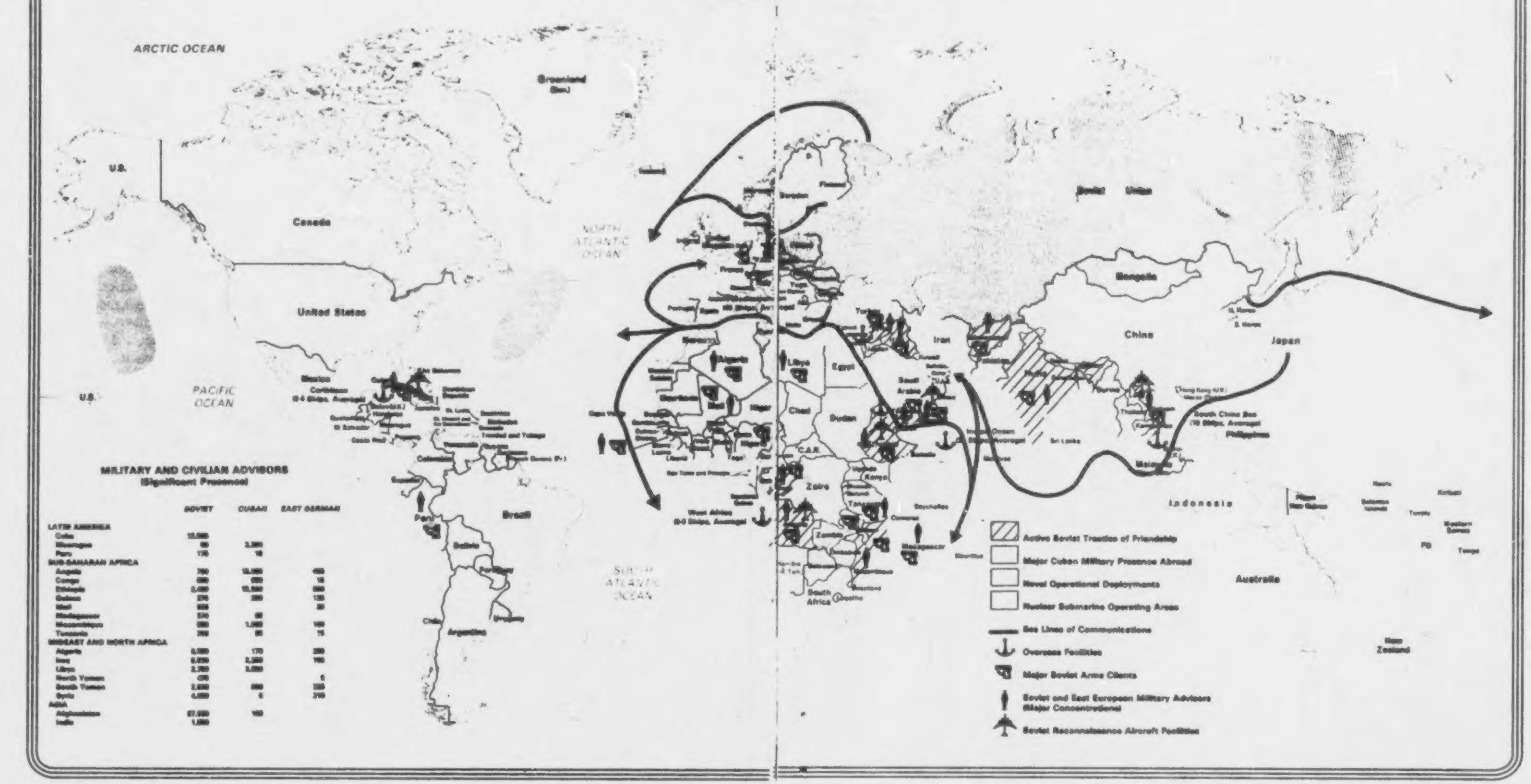
The next chart I find perhaps the most compelling of all. This is a comparison of what the Soviets turned out on the average each year between the period 1974 to 1982. That is what the red bar is. The blue bar is what we are asking for this year.

So it should be quite apparent that we are not seeking unreasonable numbers or an unreasonably large procurement when the red bar shows what the Soviets have done every year since 1974 on the average, and that of course means that some years we were larger than that red bar and some years somewhat smaller. The blue is what we are seeking this year in tanks, armored vehicles, artillery launchers, tactical combat aircraft, theater nuclear forces, ballistic missiles submarines, attack submarines, and major surface war ships.

These are the things that would be cut down if we have to take the cuts wanted by people who have been quoted in public are forthcoming. These are the things that would have to suffer. These are the production rates that we now have, but remember this is 1984. If we put a chart up for 1980 or 1979, the blue bar in many cases would scarcely be discernible on that scale.

Chart 5

## SOVIET GLOBAL POWER PROJECTION


ARCTIC OCEAN
U.S.
Canada
United States
PACIFIC OCEAN
Greenland (Den.)
Iceland
NORTH ATLANTIC OCEAN
SOUTH ATLANTIC OCEAN
Mexico
Caribbean 0-4 Ships, Average
Brazil
Peru
Bolivia
Chile
Argentina
Sweden
Finland
Soviet Union
Mongolia
China
Japan
Iran
Libya
Egypt
Chad
Sudan
C.A.R.
Zaire
Zambia
Kenya
Saudi Arabia
South Africa
Seychelles
Madagascar
West Africa 0-5 Ships, Average
Sri Lanka
South China Sea (18 Ships, Average)
Philippines
Indonesia
Australia
New Zealand
Active Soviet Treaties of Friendship
Major Cuban Military Presence Abroad
Naval Operational Deployments
Nuclear Submarine Operating Areas
Sea Lines of Communications
Overseas Facilities
Major Soviet Arms Clients
Soviet and East European Military Advisors (Major Concentrations)
Soviet Reconnaissance Aircraft Facilities

MILITARY AND CIVILIAN ADVISORS
(Significant Presence)

| | SOVIET | CUBAN | EAST GERMAN |
|---|---|---|---|
| LATIN AMERICA | | | |
| Cuba | [illegible] | | |
| Nicaragua | [illegible] | [illegible] | |
| Peru | 170 | [illegible] | |
| SUB-SAHARAN AFRICA | | | |
| Angola | [illegible] | [illegible] | [illegible] |
| Congo | [illegible] | [illegible] | [illegible] |
| Ethiopia | [illegible] | [illegible] | [illegible] |
| Guinea | [illegible] | [illegible] | [illegible] |
| Mali | [illegible] | | [illegible] |
| Madagascar | [illegible] | [illegible] | |
| Mozambique | [illegible] | [illegible] | [illegible] |
| Tanzania | [illegible] | [illegible] | [illegible] |
| MIDEAST AND NORTH AFRICA | | | |
| Algeria | [illegible] | 170 | [illegible] |
| Iraq | [illegible] | [illegible] | [illegible] |
| Libya | [illegible] | [illegible] | |
| North Yemen | [illegible] | | [illegible] |
| South Yemen | [illegible] | [illegible] | [illegible] |
| Syria | [illegible] | [illegible] | [illegible] |
| ASIA | | | |
| Afghanistan | [illegible] | [illegible] | |
| India | [illegible] | | |

VII SOVIET GLOBAL POWER PROJECTION

The next chart shows that they haven't just accumulated weaponry in the Soviet Union. They have actually matched their military buildup with an expansion in the strategically important areas around their periphery. They have extended their power and their influence through security and cooperative agreements worldwide. They have made massive arms deliveries to the Third World, double our own from 1977 and 1981. It is sort of a popular myth that we are the world's largest arms supplier. We are not. They have proxies in Cuba and in various other parts of Central America and Africa. They have greatly increased power projection capabilities, and even some East German proxies in some of those areas.

Their power projection capabilities are shown as areas where they can interdict or in fact transverse the sealanes of communication as shown in the red line. They have expanded overflight and access rights to operating bases in key parts of the world. When the Falkland Island's war started, we and the British found that there were literally no bases that could be used between Ascension Island and the Falklands, which of course added enormously to the problems the British had in that particular war. That is an indication of the kinds of problems that we would have, should conflict arise, in unexpected, or other parts of the world, far distant from our own shores.

The cumulative effect of all of this, plus the fact that they have an occupying army in Afghanistan and are threatening in various other parts of the world is that we must change our thinking concerning the type of attack that we might have to confront and the areas in which we could be attacked, the effectiveness of such an attack and the additional problems we would have in reaching our allies with necessary metals and minerals.

Now the next point that I would like to make is the concern about the price of a strong deterrent and a strong defense—the points that you raised—Mr. Chairman, in your opening statement.

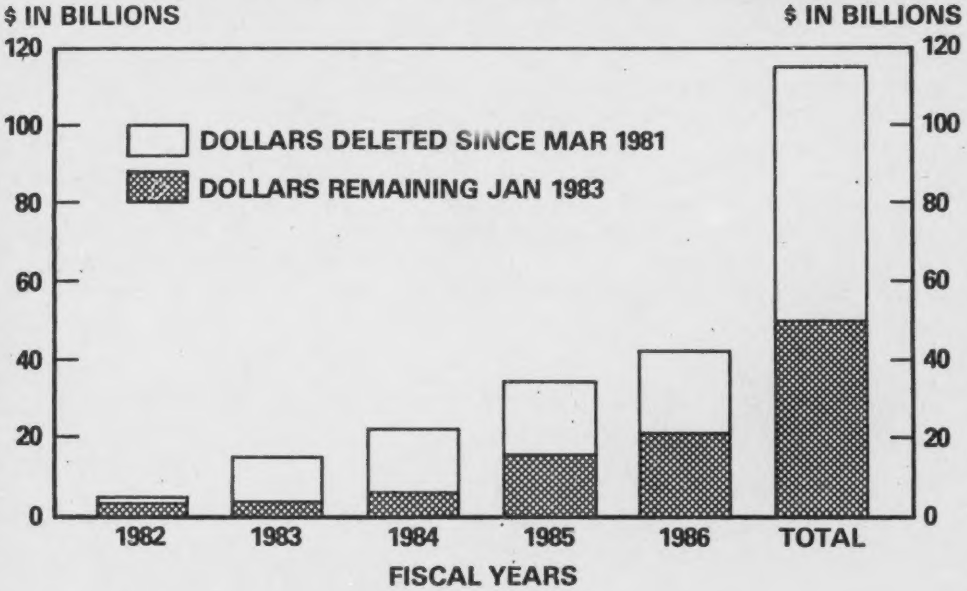
There has been some feeling—and this is another one of the myths that needs exploding—that the defense budget has been sacrosanct and that nobody has dared to look at it.

You will recall that when the President came to office in January 1981, one of the first tasks that we undertook in the Department of Defense—a very difficult and a very long task, taking about 6 weeks—was actually to make up two new budgets, to revise the budget we inherited and to begin all of the work on the next budget. This normally takes about 10 or 11 months.

We put together a program based on the various principles that we mentioned at the beginning, the foreign policy objectives of the administration, which don't differ materially from the foreign policy objectives of the United States over the years, the threat that we face in carrying out these objectives, the things we have to do about the threat, and how much all of these things would cost. We put together a program, and the President not only participated but endorsed it enthusiastically.

Chart 6

## COMPARISON OF U.S. DEFENSE OUTLAYS ADDED SINCE THE CARTER BUDGET



That program involved, as we see on the next chart, putting together a $116 billion addition over a 5-year period to the Carter budgets and the Carter projections that we inherited. The bar at the far right shows the $116 billion, and the red portions show the amount that is still remaining after the reductions that have been made in that program from this supposedly sacrosanct budget. Those reductions total $66 billion, which leaves $50 billion over the budgets that we inherited. As you, I and others who have examined those budgets that we inherited know, they were not adequately funded. They would not have produced the amount of weaponry, manpower, skills, training, readiness, or any of the other things that were listed as being able to produce.

So we have a very substantial reduction, and we have taken more than a fair share of cuts. It does involve a lessened ability to recover the strength that we need in the time that we think we need it.

The other thing that we have to bear in mind is that not just this period, but that in the decade of the seventies, in real terms after inflation, defense spending went down about 19.8 percent and payments to individuals in the United States in real terms in the same decade went up 122 percent.

So because of the neglect, if you want to call it that, occurred during this period, and the enormous Soviet increase that went on during that period and the decade that preceded it, put us rather badly out of balance.

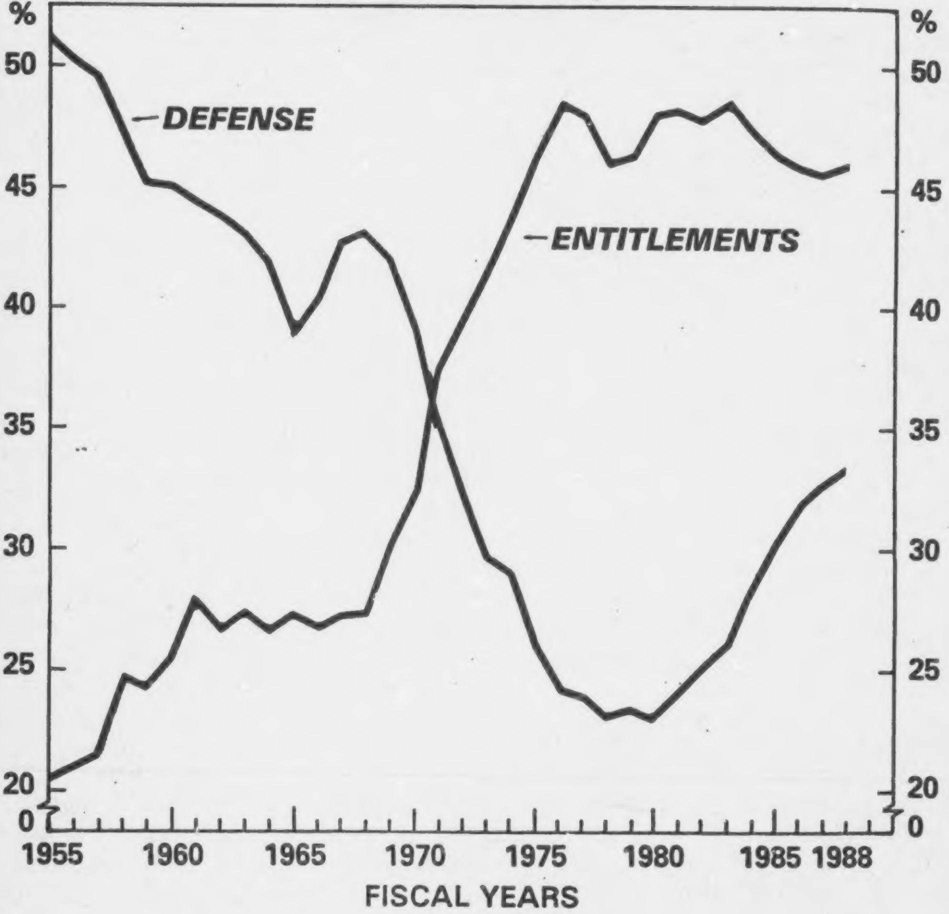
It is essential that we realize the combination of these two things and the reductions that we have already made. Some of those reductions are involved in a Government-wide program in which military personnel are being asked to join with all other recipients of Government payments, in a common sacrifice by foregoing an annual pay raise in fiscal year 1984. This is something we regret very much and the person who perhaps regrets it more than anyone else is the President, as he said in his state of the Union message. If recruiting and retention should become seriously and adversely affected to the point that our forces will suffer during the coming fiscal year, we certainly will recommend appropriate action to the Congress.

I have served notice and told the troops all over the world, that I will seek to repay the sacrifice we are asking of our military this time with a substantial pay raise in 1985, enough that we fervently hope will be sufficient to make up for this year's pay freeze.

The President and I remain fully committed to fair and equitable pay that is competitive with pay levels in the private sector, an objective which we reached and secured with the help of the Congress.

Chart 7

## SHARES OF THE BUDGET
### (OUTLAYS)



Now, the chart that is before you, you can see the very dramatic reversal that as I mentioned a moment ago, has taken place. Starting back in 1955 when the defense budget comprised more than 50 percent of the Federal budget, we see that this percentage has dropped almost regularly. There was a slight increase in the percentage during the Vietnam years, an increase that did not add any military strength to the country. That was followed by a very steady drop until 1981.

The entitlement programs, however, have gone up steadily. They started in 1955 at about 20 percent, and they will reach under the President's current plans an amount just under 50 percent of the total budget in the current year's budget.

Defense, meanwhile, has gone all the way down to 23 percent in 1980 and only now has started up again. This year, if the President's budget is adopted, it will be about 28 percent of the total budget. So the Defense Budget does have to be kept in perspective.

At the end of the 5-year period it will be up to about 33 percent, and that is a little higher than it was earlier, because the President's plan is to have the total Federal budget go down. But as you can see there has been an almost total reversal of priorities that have taken place during a period when the Soviet expansion began and has proceeded year after year without the slightest pause for now over 21 years.

Finally, I think we have to remember, Mr. Chairman, that the 1984 budget is part of a long-term program designed to restore our defenses. It isn't something we can do quickly. It is a program, which as I said, the Congress began before we took office and which Congress will have to finish after this administration.

This means that neither this Congress nor this administration begins the defense program with a clean slate. Defense acquisition is a very long-term process, which I wish weren't so long, but every program for which we seek an appropriation has quite a history behind it and not every program meets all the specifications that we desire. Some have cost more than they would have if they had been developed or produced more efficiently and more quickly.

I have said many times that to a considerable extent, we are a prisoner of past decisions. But all of these programs respond to a very real threat and they fill what would otherwise be a major gap in our defenses—a gap that would occur while we were throwing out whatever had been done in the past and starting over with redesign and all of the factors that go into development of new weapons systems. This is a gap we cannot afford.

On the other hand, this long-term program means that together we must accept the fact that this program will require a long time to complete, and in a sense you don't really complete it. But what we can do is regain sufficient strength so that we can be sure that we can maintain the deterrence that has kept the peace over all these years.

I can think of no higher responsibility that we have together than to provide for the Nation's security, and I think we simply have no alternative in insuring that in peacetime we have the capabilities to defend against aggression.

If I might add a few words, Mr. Chairman, about some of the things we have heard as we have made up this budget. We have heard a very large number of people saying that "I am all for defense, and I am one of the strongest of hawks," but then they always add "but," and these are the people we call the defense buts, not buffs, but defense buts. They say, but we must cut the defense program because the deficit has to go down, or we must cut it in fairness to other programs, or we must cut it for a whole myriad of other reasons. I have to emphasize to them that we simply cannot reduce defense spending any further without undermining the security of the United States.

None of us knows how long we have, and it may turn out in the long perspective of history, after all of our responsibilities personally have been completed, that we had enough time. It may turn out that we do not. I am not allowed the luxury of very many mistakes. So we think that the threats which we face are very great and that we have to take the action today that will continue the work that has been begun and has brought us quite a fair distance along the road that we need to go.

There is great resistance to accepting the real meaning of all the facts that we have tried to present this morning in this brief presentation because if you accept them you accept the need for a major sustained response which many people don't like.

Defense is basically an unpopular basis for expenditure for more than a year or two. The consensus that Senator Jackson referred to, did seem to exist for a time, but historically it has never existed for more than a year or two. Part of that is because of the basic unpopularity of the general subject matter in a free and open democratic society such as ours. Part of it is because of the perception is correct. We have started to catch up and the hope is that we could do all that in the years that we have and with the funds that we have spent. You and I know that that is not possible. You and I know that it takes a long time, just as it has taken the Soviets some 20 years to acquire by reason of steady application of an immense portion of their resources—over 15 percent of their GNP each year—to achieve the kind of strength that they now have.

When we confront what they have, an opposing coercive offensive strategy, then that requires continued vigilance to maintain our deterrent.

When deterrence succeeds it is easy to attribute the maintenance of peace not to the contribution of the defense that enforces the deterrent but to a host of more facile assumptions, some imagined new found peaceful intent of our opponents, the spirit of détente, negotiations for SALT treaties in the past, growing economic interdependency, the value of trade, and so forth.

But when deterrence fails and the opponent has deliberately weighed the risks and still has decided that because of our weakness it would be safe for them to attack, then the dividends of a strong defense are unquestionable. But then it is too late.

Unless you can acquire a defense, and unless it is in being and is maintained at a readiness level consistent with our defensive strategy, it is too late to try to regain it after a war starts. We simply cannot wait to restore our military strength. We have to do it now, in this budget as we had done it in last year's budget and the year before that. The rapid and continuous growth of Soviet offensive military power does not allow us the option of waiting until the economy fully recovers or, on the other hand, until some major emergency develops.

The simple fact is that the past decade of inadequate defense spending is forcing this administration and the Congress to accept double duty. We have to increase the basic readiness and sustainability of our forces to be prepared for any immediate crisis should it arise. The best way to prevent such a crisis from arising or occurring is to be strong and to be prepared. But at the same time we have to make up for the lost years of investment by undertaking the research and development and the force modernization that we need to meet the threats which may arise in the future.

We simply cannot avoid performing this double duty without endangering our immediate security, or passing on to future administrations and future Congresses the legacy of neglect and danger that we have inherited that is imperiling the Nation by allowing our deterrent capability to weaken to the point of danger. This is something that I think we are all determined not to do.

Mr. Chairman, I appreciate very much the time and the courtesy that you have extended to enable me to make this statement. I know General Vessey has a statement and then we will be delighted to try to take your questions.

[The prepared statement of Secretary Weinberger follows:]

## PREPARED STATEMENT OF CASPAR W. WEINBERGER, SECRETARY OF DEFENSE

Mr. Chairman, members of the committee, before I begin a discussion of our defense program, let me first say how much I appreciate Congress' support for—indeed, Congress' lead—in rebuilding our defenses. It was Congress that initially set the pace for this effort by appropriating funds above President Carter's budget request for fiscal year 1981. And it is Congress that made it possible for President Reagan to restore the basic readiness of our forces as well as begin our long-term defense modernization program. I know that members of this committee in particular have long been deeply concerned about a dangerous shift in the military balance, and I think I speak for the entire Nation in thanking you for your leadership.

The budget request itself is only the final step in designing our defense program. Before we put numbers to programs, we have determined our overall national security objectives the military threats posed to those objectives, our defense strategy to deal with these military threats and, finally, the forces we require to implement that strategy.

In my testimony last year I focused on the modifications that we had to make to the military strategy and defense posture that we inherited. In some cases, we found that the policies we inherited did not conform to the international realities we faced, and we had to make some changes. Today I want to discuss our entire policy from a broader outlook, considering both the reforms we have made, and the enduring principles frm the past that together form the foundation or our current defense policy.

### NATIONAL SECURITY OBJECTIVES

At the outset, it may be useful for us to recall that our overall national security objectives, in a very abbreviated form, are:

To deter military attack against the United States, its allies, and other friendly countries.

In the event of a conventional attack, to deny the enemy his objectives and bring a rapid end to the conflict on terms favorable to our interests.

To promote meaningful and verifiable mutual reductions in nuclear and conventional forces.

To inhibit further expansion of Soviet control and military presence.

To avoid subsidizing or supporting the Soviet buildup by preventing, in concert with our allies, the flow of militarily significant technologies and material to the Soviet Union.

### THE SOVIET MILITARY THREAT

In assessing our ability to achieve these national security objectives, we recognize that the Soviet Union poses, and for the foreseeable future will continue to pose, the most formidable threat to the United States and our interests. Of course, we recognize that some threats arise independently of the Soviet Union. But, more often than not, the magnitude and persistence of these other threats and our difficulties in countering them are greatly aggravated by Soviet policies, backed by the expanding reach of Soviet military power.

The 20-year Soviet military buildup, coupled with the collective failure of the United States and our allies to make a sufficient response, has resulted in a dangerous shift in the global military balance.

This global military balance has shifted against us because the Soviet Union has outspent and outproduced us for at least a decade. Even when we include the allied efforts of each side, we find that the Warsaw Pact has outspent and outproduced the NATO countries.

[See chart 1: U.S.-Soviet Military Investment.]

As this chart reveals, total Soviet investment in future military capabilities—that is, for weapons and other equipment, construction of military facilities, and research and development—is about double ours.

[See chart 2: U.S.-Soviet Military Investment by Mission Area.]

This aggregate comparison can also be viewed in its component parts. As this chart shows, during 1980-81 Soviet investment in strategic nuclear forces was about three times higher than ours; about 50 percent higher for general purpose forces; and about twice our rate for research and development. This is in stark contrast to the situation 15 years ago.

But, more important than the "input"—what the Soviets spend on defense—is the "output"—the tanks, planes, ships, missiles, and other military hardware they produce and deploy.

[See chart 3: U.S.-Soviet Weapons Production.]

In "Soviet Military Power" we published lists of equipment produced by the Soviet Union. On this chart, however, we are comparing production totals only of equipment added to the inventory of Soviet and U.S. forces to compare actual military capability. If we had used total production figures, which include export equipment, the imbalance would tip even more toward the Soviet Union.

This trend is even more worrisome when one considers that the Soviet Union has also upgraded the quality of its weapons—particularly in conventional forces. The Soviet Union has always fielded greater numbers of conventional weapons which we offset with smaller numbers of more capable equipment. But now we find that the steady growth in Soviet investment has allowed them to produce increasingly more sophisticated weapons such as the potent T-72 tank, accurate air defense weapons, and fighter aircraft capable of operating in all types of weather.

[See chart 4: U.S. Soviet Weapons Production in fiscal year 1984.]

As the next chart illustrates, even though the United States is now increasing its rate of weapons production, the numbers sought for this year will fall far short of the average annual Soviet production.

In submitting this data for your consideration, I want to emphasize that it is not our intention to match the Soviets tank for tank or aircraft for aircraft. Our intention is to regain an effective deterrent against either Soviet conventional or nuclear aggression. We recognize that other factors besides quantitative comparisons affect the military balance. One of the most important of these is that the Soviets have matched their military buildup with military and political expansion into strategically important areas far from the Soviet periphery.

[See chart 5: Soviet Global Power Projection Map.]

As this map shows, the Soviet Union now has:

Acquired security and cooperative agreements in Africa, the Near East, Southeast Asia, and Southwest Asia.

Undertaken massive arms deliveries to Third World countries—double the amount we supplied from 1977-81.

Acquired Cuban, East German, and/or Libyan military proxies in Central America and Africa.

Greatly increased its power projection capabilities.

Expanded its overflight and access rights to operating bases in key parts of the world.

Occupied Afghanistan.

The cumulative effect of the Soviet military buildup and Soviet expansionism has been not only to change the type of attack we might confront and the areas in which we could be attacked, but also to increase greatly the effectiveness of such an attack. The increased size and quality of Soviet forces has enabled them to turn from a defensive force posture to one increasingly structured for offensive use. Their increased naval and power projection capability, coupled with their acquisition of critical footholds in strategic locations throughout the world, enables them to launch and maintain conflict in several theaters simultaneously. Their buildup of nuclear forces, particularly ICBM's, enables them to threaten to destroy a very large part of our force in a first strike, while retaining overwhelming nuclear force to deter any retaliation we could carry out.

## DEFENSE STRATEGY

Our defense strategy for dealing with this threat consists of a series of discrete but interrelated elements, some of which have endured for many years, others of which are more recent in origin. It incorporates three main principles:

First, our strategy is defensive. That is to say, it excludes the possibility that the United States would initiate a war or launch a preemptive strike against the forces or territories of other nations.

Second, our strategy is to deter war. The deterrent nature of our strategy is closely related to our defensive stance. We maintain a nuclear and conventional force posture designed to convince any potential adversary that the cost of aggression would be too high to justify an attack.

Third, should deterrence fail, our strategy is to restore peace on favorable terms. In responding to an enemy attack, we must defeat the attack and achieve our national objectives while limiting—to the extent possible and practicable—the scope of the conflict.

To carry out this strategy we have emphasized three vital supporting policies.

First, the United States remains part of, and contributes to, a collective defense posture that incorporates the strength of our allies. The North Atlantic Treaty, the Rio Treaty, the ANZUS Treaty, and our treaties with Korea, the Philippines, and Japan help provide for an effective common defense against external aggression.

Second, to buttress our collective security posture, we maintain forward deployments that, combined with the forces of our allies, provide the first line of conventional defense in Western Europe, Japan, and Korea. In the event of war, we would reinforce these forward-deployed units rapidly.

Third, we seek a flexible force structure that builds on our alliance commitments and forward deployments and provides us a variety of options for quickly responding to unforeseen contingencies in any region where we have vital interest to defend.

## THE PROBLEMS WE INHERITED

When the Reagan administration took office, we found inconsistencies between the existing strategy and the forces available to carry out that strategy. Furthermore, that defense program held little promise of providing either the strategy or the force posture necessary to maintain deterrence in future years in light of the changing Soviet threat. Therefore, we had two simultaneous tasks to accomplish. We needed to make our forces ready to fight immediately, should conflict be forced upon us. We also needed to begin long-term improvements to our defense posture so that we would be prepared to meet threats that might arise in the future.

## OUR PROGRESS TO DATE--READINESS AND PERSONNEL

In order to have our forces ready to respond to a crisis in the near term, it was necessary to improve quickly the readiness and sustainability of our existing forces. To improve force readiness we have allocated resources for adequate manning and training, maintenance, supplies of spare parts and ammunition. We have increased readiness funding consistently in fiscal year 1981, fiscal year 1982, and fiscal year 1983. To attract and retain qualified men and women in our Armed Forces we increased military pay and bonuses. Military pay was increased by $3.2 billion in fiscal year 1981, $4.5 billion in fiscal year 1982, and $1.5 billion in fiscal year 1983, for an average 11.7 percent pay raise in fiscal year 1981, 14.3 percent in fiscal year 1982, and 4 percent in fiscal year 1983.

As a result of these efforts by the administration and Congress, the readiness of our forces has already improved substantially across the board and the number of fully or substantially ready major Active units has increased by almost one-third. To improve upon the gains already made, funding for readiness continues to be a high priority in the fiscal year 1984 budget.

The caliber of the men and women in uniform has also improved dramatically. During the past year all the services met or exceeded their recruiting objectives, and 86 percent of our non-prior service recruits were high school graduates, up from 68 percent in fiscal year 1980. Retention showed similar gains, with almost 70 percent of all eligible personnel choosing to reenlist in fiscal year 1982 compared to only 55 percent 2 years earlier.

This year, we have asked our military personnel to join all other recipients of Government payment in a common sacrifice by foregoing a pay raise in fiscal year 1984. By doing so they contribute, along with all other Government employees and beneficiaries, to the important national goal of reducing near-term budget deficits.

We hope that this will not cause recruiting and retention to suffer. If recruiting and retention do become adversely affected to the point that the readiness of our forces will suffer, during the coming fiscal year, we will of course recommend appropriate action to the Congress. Also, I will seek to repay the sacrifice we are asking of our military, with a substantial pay raise in the fiscal year 1985 budget—enough, I hope, to make up for this year's pay freeze. The President and I remain fully committed to fair and equitable military pay that will be competitive with pay levels in the private sector.

### SUSTAINABILITY

We have also sought to improve the sustainability of our forces. The Soviet Union today has the war reserves to fight far longer than they could a decade ago. In order to ensure that the Soviets never calculate they could simply outlast us, our budget requests resources for more replacement equipment, spare parts, ammunition and other essential consumables, and for a more rapid expansion of defense production during an emergency.

### MODERNIZATION

In order to provide the forces necessary to assure deterrence now, and into the future, we had to begin simultaneously a systematic modernization of both our conventional and our nuclear forces. We do not seek high technology weapons for the sake of having high technology. But, we must field weapons that are superior to the Soviets' weapons and today we see that the Soviets are fielding more and more highly sophisticated weapons which pose new threats to U.S. and allied forces. To deter, and if necessary defeat, the use of these weapons, we must ensure that we can counter with improved capabilities of our own.

### CONVENTIONAL FORCE MODERNIZATION

This modernization program will provide enhanced capabilities for all components of our conventional forces—so that they can counter the increased Soviet conventional threat. To cite one example, the Soviet's Backfire bomber presents a grave threat to our maritime forces that can be countered only by sophisticated defenses. The Backfire can fly farther and faster and carry more missiles than its predecessors; and its missiles are faster and have a longer range than any we've faced in the past.

To defend against this Soviet capability, we now need better early warning from satellites and aircraft to detect these bombers earlier. And we need fighters with more accurate weapons and improved range to intercept the Backfire before it can launch its missiles. To achieve these capabilities we are upgrading our satellites, AWACS, and fighters. Because we cannot hope to destroy all the bombers before they launch their missiles, we have also developed the Aegis, a cruiser with a missile defense system which has an improved ability to detect low and high flying missiles. Its sophisticated radars and computers can track a large number of missiles and aircraft simultaneously; its air defense weapons are even capable of destroying missiles.

### NUCLEAR FORCE MODERNIZATION

We must also modernize our nuclear forces in order to restore the balance with Soviet nuclear forces. Although all of our strategic forces account for only 15 percent of the defense budget, they enable us to maintain our ability to deter nuclear conflict now and in the future, and also increase the likelihood of obtaining significant, mutual arms reduction agreements with the Soviet Union. The key components of our nuclear force modernization are production of the MX missile, Trident missile and submarine, B-1 bomber, Pershing II and ground launched cruise missile, and improve strategic defense and command, control and communications capabilities.

Our nuclear modernization program is not designed to achieve superiority or a first-strike potential. We recognize that there can be no winners in a nuclear war. But this recognition on our part is not sufficient to prevent the outbreak of nuclear war; it is essential that the Soviet leadership understand this as well. If the Soviets recognize that our forces have an effective retaliatory capability—that they can and will deny the Soviets their objectives at whatever level of conflict the Soviets might try—then our deterrence is effective, and the risk of war diminished.

## THE DEFENSE BUDGET

Before I conclude, I want to correct some misconceptions regarding the defense budget.

[See chart 6: Defense Cuts.]

First, the defense budget has not been sacrosanct—it too has taken its "fair share" of cuts in the Reagan administration. As this chart shows, when the Reagan 5-year defense budget was unveiled in March 1981, we planned to add $116 billion to the Carter administration budget for the same period. Now, less than 2 years later, that figure has been reduced by more than half. And we must also recall why it was necessary for the President to ask such a large increase for the 1980's. It was because our neglect of our Armed Forces in the 1970's coincided with the vast increases in the U.S.S.R. military strength described earlier.

But, the cuts we have made in the President's defense spending plan have not sacrificed readiness for modernization. Since we took office over 100 marginal weapons or equipment programs have been eliminated, reduced or merged.

Third, cutting back on defense is not the solution to this Nation's very real deficit problem. The increase in defense spending has not produced these large deficits, and a decrease in defense spending, while it could endanger American security, would not cure them.

[See chart 7: Comparing Defense and Entitlements.]

Obviously Federal spending levels affect the size of the budget deficits. It is true that total Federal spending has grown significantly over the past two decades. But, as this chart indicates, entitlement spending has skyrocketed over the past 15 years, while defense spending slipped and is only now approaching its 1968 level. Even with the currently proposed increases, defense spending in fiscal year 1984 will constitute only 28 percent of the total Federal budget, in sharp contrast to the 40-50 percent share allocated to defense during the 1950's and 1960's.

Finally, I want to address those who say "I am for defense, but . . ." And those who say "I don't know anything about the defense budget, but—we must cut it to reduce the deficit, or we must cut it in fairness to other programs, or we must cut it in fairness to other programs, or we must cut it for a myriad of other reasons."

I must emphasize to them that we simply cannot reduce defense spending any further without undermining the security of the United States. We cannot afford a situation in which legitimate and necessary defense spending becomes the "whipping boy" of those who look only at budget or deficit numbers or forget that the Soviets are driven by no such constraints. We must not forget that defense needs must be determined by the threat to our national security that we face.

We must therefore develop a responsible and balanced understanding of the real meaning of the threat we face. The detailed facts are clear enough. But there is great resistance to accept the real meaning of these facts, because to do so is to accept the need for a major sustained response. Confronted as we are by all manner of other real or apparent needs, there is a temptation to argue away even the most overwhelming evidence, with misplaced hope that we can continue as usual, putting off or canceling unpopular military necessities, and increasing our spending on more politically popular domestic programs. Instead, the regrettable fact is that, in view of the threats posed to our national security, this course is no longer open to us.

We must also recognize that the commitment to deterrence and defense is neither easy nor inexpensive. When it confronts an opposing coercive "offensive" strategy, it requires continued vigilance to maintain. When deterrence succeeds, it is easy to attribute the maintenance of peace not to the contribution of the defense that enforces the deterrent, but to a host of more facile assumptions—some imagined new-found "peaceful intent" of the opponent, the spirit of détente, growing economic interdependency, and so forth. When deterrence fails, however, and the opponent has deliberately weighed the risks and still decided to attack, the dividends of a viable defense are unquestionable. But unless such a defense is acquired, is in being, and is maintained at the ready, it is too late to try to regain it after war begins.

We simply cannot wait to restore our military strength—we must do it now, this year, in this budget. The rapid and continuous growth of Soviet offensive military power does not allow us the option of waiting until after the economy fully recovers, or waiting until an emergency develops.

The past decade of inadequate defense spending has forced us to accept "double duty." We must increase the basic readiness and sustainability of our forces to be prepared for an immediate crisis, should one occur. At the same time we must make up for lost years of investment by undertaking the research and development, and force modernization—including the modernization and strengthening of all three parts of the strategic Triad—that are needed to meet threats that are likely to arise in the future. To do one at the expense of the other or to stint on either would be to undermine the security of the United States and that, ladies and gentlemen, I, and I hope you, are not willing to do.

Chairman **Tower**. General Vessey?

## STATEMENT OF GEN. JOHN W. VESSEY, JR., CHAIRMAN, JOINT CHIEFS OF STAFF

General **Vessey**. Mr. Chairman, in the interest of time I will add only a few points to those that have been raised by Secretary Weinberger.

He has laid out very clearly the need for a strong defense and the basis for building that strong defense. He has also alluded to the fact that the readiness of our own forces has increased and is perhaps at an all time high.

Thanks to the support of the Congress, we have relearned that lesson that we have perhaps learned many times in our several hundred years of history, that the solid foundation for a strong defense is the people in the Armed Forces of the United States.

We had the best year in recruiting and retention that we have had since the All Volunteer Force began. All the services met their goals. Eighty-six percent of those who were enlisted were high school graduates and 87 percent of those who were enlisted were above average or higher in the mental categories.

The operating commanders report to me that the readiness has improved, not only because the people problems are on the way toward solution, but that the backlog of maintenance of equipment has been reduced, the flying hours for aircraft and the steaming hours for ships have been increased. The training exercises have been better and the modernization programs that have been started are beginning to see increases rates of modernization in the forces in the field. It is important to maintain that momentum.

But as the Secretary pointed out, defense is relative. The Soviets are not standing still. They are moving on at this accelerated pace that has continued for the last 15 years. While we increased our modernization, the Soviets produced 3 times as many tactical aircraft as we did last year, 2½ times as many tanks, and while we are debating the modernization of our strategic forces, the Soviets have added hundreds of modern MX quality ICBM warheads to their forces, to say nothing of the intermediate-range missiles and warheads that have been added.

I would urge the same thing that you, Senator Jackson, urged, that we recognize the need for steadiness of purpose, both because it is the only way to fulfill the needs for our defense, and it also insures that we can do it at the greatest economy to the Nation in fulfilling those needs.

Thank you.

[The prepared statement of General Vessey follows:]

## PREPARED STATEMENT BY GEN. JOHN W. VESSEY, JR., USA, CHAIRMAN, JOINT CHIEFS OF STAFF

Mr. Chairman, members of the committee, I appreciate this opportunity to share with you my views on the defense needs of the Nation.

The capabilities of U.S. forces are improving to face the growing threat. Clearly they are stronger now than at any time in the recent past; many needed programs have been set in motion. We can have considerable confidence in the forces we have, in their readiness, and in their ability to undertake assigned tasks. My confidence has been bolstered by what I've seen of our forces at home and abroad. But military strength is relative. The capability to deter threats against our interests cannot be viewed in isolation. Our posture must be judged against the capabilities of potential adversaries today, and the likely threats of the years ahead. Our national security is far from assured. We need to work together to reduce the risks to our security now and in the future.

### THE SOVIET THREAT

Peace in the world and our own security are challenged by the sustained growth of Soviet military power, and compounded by instabilities in many areas of the world—instabilities which are all too often exploited by the Soviets and those who assist them.

Soviet military power is a reality with which we must deal. Soviet military forces are large—about 5 million active in contrast to our 2 million active. Their forces are also well organized, well trained, and well equipped for a full range of military operations.

Soviet forces are designed for offensive operations while at the same time protecting the homeland from attack.

Soviet weapons are good, and the extraordinary Soviet effort in research and development, over 50 percent greater than ours, should guarantee that their weapons will also be good in the years ahead.

The Soviets continue to modernize their forces across the board and at a rapid pace.

Soviet training demonstrates the ability to use the forces effectively.

### STRATEGIC MODERNIZATION

We and our allies need military forces which, combined with our other strengths, will deter the Soviets from using their forces to threaten our interests. We need to continue the recent momentum in improving the manning, modernization, and readiness of our forces.

Few programs have received the attention now focused on our strategic nuclear force modernization. While we have been debating the need to modernize, the Soviets have been fielding modern systems, and developing and testing the next generation of improvements for their strategic forces. In the past two years, the Soviets have fielded many hundreds of new ICBM warheads with greater accuracy and improved hard target kill capability while we've fielded none. Another measure of Soviet activities in strategic forces can be seen in the test and training launches of strategic ballistic missiles. Last year the Soviets launched about 150 missiles compared to less than one-third that number for the United States.

The Soviet nuclear threat makes clear the need to give our strategic forces the highest priority in modernization. We delayed modernization, and now we are faced with the need to modernize all legs of our Triad at the same time. To maintain our strategic deterrent, we need to go ahead with the prompt deployment of the Peacekeeper missile, Trident submarine, B-1 bomber and cruise missiles.

### THEATER NUCLEAR WEAPONS

This committee is well aware of the details associated with our planned deployment of ground-launched cruise missiles and the Pershing II missile under NATO's dual track decision of 1979. SS-20's continue to threaten the nations of NATO

Europe and the forces of the alliance. Since last February, the Soviets have deployed over 50 additional SS-20 intermediate-range missiles pointed at our Western Allies; we have yet to deploy anything comparable. Our commitment to the elimination of the most destabilizing longer-range systems in Europe was reemphasized by the President just last month. There should be no question about the determination of the United States to strive for an arms control agreement which addresses legitimate security interests of the NATO Alliance. But barring a satisfactory agreement, it's essential that we move forward with plans to deploy the Pershing II and ground-launched cruise missile.

### ARMS CONTROL

We should continue to pursue nuclear arms reductions earnestly. Comprehensive, equitable, and verifiable arms reduction agreements could lessen the danger of nuclear war. But we must be guided by Soviet actions, not just their words. It is clear to me that our nuclear weapons modernization programs are needed not only to spur serious arms reduction negotiations and meaningful constraint, but to provide for our security after the negotiations are over.

### ALLIANCES

The defense of the United States will continue to depend upon a strong system of alliances and other security coalitions. Our firm commitment to NATO and other allies is consistent with the global defense requirements of this country. Our friends and allies contribute weapons, trained manpower, and facilities which support us and help defend shared interests.

There is an important interdependency among us. We should continue to refine with our allies the division of labor in our mutual security effort and encourage improvements in readiness and sustainability of combined forces. U.S. and allied forces must continue to strive for a high degree of interoperability. The Joint Chiefs of Staff and major commanders will continue to stress combined training and operations.

Allied host nation support for our forces can assist in implementing the agreed Alliance strategy at reduced costs and it should be supported.

The forward deployment of U.S. air, land, and naval forces remains a key ingredient of our strategy. Such forces demonstrate the strength of the U.S. commitment to collective defense and help provide a forward shield to permit reinforcing our allies when needed. The planned levels of those forces will allow necessary modernization to proceed and preserve their deterrent value.

### STRATEGIC MOBILITY

Our strategy will continue to depend heavily on strategic mobility. Mobility forces work hand-in-glove with forward deployed units to demostrate our strength and bolster our deterrent capabilities. Today, our strategic mobility is improving, but it is not yet adequate to move and support our forces for the tasks that may be assigned. The airlift and sealift improvements in the budget need to be pursued.

### TECHNOLOGY

Sensible use of high technology multiplies the effectiveness of our forces. The size of the Soviet forces dictates that we use technology to overcome part of the disadvantage. We need to field high quality weapons and equipment efficiently and quickly. We must press on with programs which will allow our forces to maintain a technological edge and we need to get modern equipment into the hands of the troops so we can begin getting the benefits from it. We should lay to rest the notion that U.S. soldiers, sailors, airmen, and marines can't operate modern equipment. At the same time, we need to recognize that modern defense forces require good people. Our manpower programs must continue to be aimed at recruiting and retaining people with the aptitudes and motivations to operate modern weapons.

### PEOPLE

People will remain the cornerstone of our forces. The support of the Congress has been a key factor in the programs that have so greatly improved our total posture over the past 2 years—programs which reversed downward trends in recruiting and retention. Well trained, highly motivated service members will continue to be the heart of our combat readiness.

Pay and allowances, living and working facilities, the level and quality of the training, confidence in equipment, and the quality of leadership all have a great influence on the retention of good people in military service. This year the President found it necessary for military personnel as well as all other recipients of Government payments to forgo pay raises. The Joint Chiefs of Staff understand the President's decision and, with the Secretary of Defense, hope that the action will not cause recruiting and retention to suffer. We cannot afford to commit the same mistakes we made in the 1970's if we are to maintain the modern, ready forces this Nation needs to deter war.

As you deal with the budget and programs for the years ahead, I urge you to do so in light of the very real security threats the Nation faces today and those it will surely face in the future. Much as we might like to do so, we cannot roll back the calendar to days when we could rest safely behind our two ocean frontiers, mobilize our forces to go off and fight our wars in distant lands, and do so in our own time. Our safety and security are inextricably tied to peace in the rest of the world. Military force alone will not guarantee our security, but the lack of sufficient modern, ready military force of the kind needed to deter attack may well guarantee that we could lose our security.

Chairman TOWER. We will now proceed to questions. Each Senator will be allotted 10 minutes in which to ask questions and I hope that the Senators will honor that time constraint. It is my intention to stay in session until about 12:30 and then to recess for the lunch period and come back shortly after 2 and continue into the afternoon until we have completed our work here today.

## MODERN WEAPON SYSTEMS

Mr. Secretary, you mentioned the length of time required to acquire modern weapon systems. I think a number of us have been concerned about the time and the expense involved from the time that research and development is begun until we reach an initial operating capability of the system. What have you done in your department to make this process more efficient and less costly?

Secretary WEINBERGER. Senator, we have done a number of things. When we assumed office, for example, we found that the M-1 tank which was just beginning to come off production lines then had been in the process for 20 years. As I have said many times, I think that is not defensible and is one of the things that obviously contributes enormously to cost overruns.

We have looked at the anatomy of these cost overruns, so to speak, and at the procedures for trying to shorten the acquisition cycle. Obviously we want capable weapons and not just high technology gadgetry, as some have said, but weapons that can stand up to and be superior to the weapons they will have to face. That requires, based on Soviet activities, that we develop weapons more quickly than we have in the past, that we have them designed for particular purposes, and that we do two or three things once they are designed.

One is to insure that the design itself remains basically frozen, unless there is some extraordinarily strong reason for adding or subtracting something to the basic design. One of the real causes of delay is the number of times that the design is changed.

The B-1 bomber had been canceled about 4 years before this adminstration took office. I recall that when I was here before running the Office of Management and Budget, I had put in the funds for the B-1 in 1970. It was supposed to have been delivered in 1977. There were major basic design changes three or four times and as a result much larger costs. For one reason or another, erroneously as I happen to believe, it was canceled in 1977.

We now have not only looked at freezing the design, which we have done in the case of the B–1, after adding the things that we think are necessary. We have also obtained after careful negotiations, fixed-price contracts. We also have what I would call a far closer, more hands-on type management.

On the major weapons system about which I personally receive reports every 2 weeks as to the progress of those systems even though they may be many years away from delivery, anything at all that interferes or looks as if it might interfere with the critical path for the delivery of those systems, we pursue immediately. If there is anything that looks as if it is going to slow them down, any of the subcontractors or anything in the contracting process, or shortages of materials that look as if they would slow them down or make them more costly, we pursue those factors immediately and try to reverse them.

As a result, with these efforts, major systems that we are now following have had very good results in that they are on target, on time, and within or under their budgets. There are, however, a great many programs that we are entering in for which that is not the case, and they will cost more than had been originally projected.

There is inflation, which is a big factor in all of this. Indeed, a fair-sized percentage of our total cost growth, is simply to take care of inflation, even though inflation is a lot lower at the present time than many people thought it would be 1 year ago.

### ELIMINATING WEAPON DUPLICATION

But basically what we are trying our best to do now, is to eliminate duplication, or unnecessary weapons systems or duplication between the services. We are striving to procure multipurpose weapons wherever we can, freeze the design, and try to get the very best contracts that we can using fixed-price contracts whenever possible and with narrower escalation clauses, to manage them very carefully to make certain that as they develop their performance is such that we do indeed feel we should continue.

Now, there are some very difficult decisions part way along this process. You may come to a situation hypothetically where you might have put quite a lot of money into a weapon system and it is apparent that it is going to cost more than was originally planned for a variety of reasons. Materials have become scarce or the special kind of work necessary is going to be more costly than originally planned or there is a design change needed.

Then you have a question as to whether you should cancel the program and in effect lose all the money that has been sunk into it or continue. These are very difficult decisions and we have made some of them one way and some of them another. We have canceled a lot of programs that were in the marginal category.

But it is true that these things take a great deal longer than they should. I am frank to say that I don't know why they should take so long. I don't know why it should take until 1989 before we can get the D–5 missile on line. We have been back and forth and over it a number of times and I am still not convinced that it will take that long.

In the fifties we managed to design and then in the sixties bring on line the Minuteman system in about 3 years, but all these things take a great deal longer now. I think that we will see that most of the programs, the major programs, are going to require a continued application of this close management and examination in the succeeding years to make sure that we don't end up surprised by very large overruns that everyone will not have realized were going to happen.

Chairman **Tower**. Thank you, Mr. Secretary.

I will reserve the balance of my time.

Senator Jackson.

### U.S. MILITARY STRATEGY

Senator **Jackson**. Mr. Secretary, in your posture statement last year you dismissed some of the assumptions that have guided, as you know, U.S. military strategy in recent times. I refer specifically to assumptions such as the 1½ war, short war assumptions. Instead you articulated a more expansive military strategy which included the long-term goal of being able to meet the demands of a worldwide war, including concurrent reinforcement in Europe, deployment to Southwest Asia and support in other areas of conflict.

May I ask is that still the goal of the administration's military strategy and, if so, under the administration's defense program when will our military forces be able to meet such requirements or demands?

Secretary **Weinberger**. Senator, let me start the answer to that question this way. We do have a continuing goal to deter any attack and to have the necessary resources so that any adversary or potential adversary would correctly perceive that we have the degree of strength, conventional or strategic, to deter an attack. In short, an attack by them would be at a cost far too high for them to bear so they would be deterred.

To maintain that continuing strategy, which has not changed, it is necessary to make changes in our capabilities as the capabilities of the Soviets increase or change. The 1½ war or the short war, which was based upon the idea, as you know, that you would have a short, sharp conventional exchange, followed by a rapid escalation to nuclear, are not likely or possible paths for us to follow.

We cannot make up our military capabilities, our requirements, our military tactics, or strategy in a vacuum. The Soviets have increased their capability so that it is quite apparent that they are able to carry on simultaneous conflict in widely separated parts of the globe. It is necessary therefore for us to maintain our deterrent, not to try to be superior to them or anything of the kind, but to maintain a deterrent capability of resisting aggression in more than one part of the globe together with our allies. We have a collective strategy that requires and involves the support of a number of other friendly nations and allied nations.

My net response to the last part of your question is, I think, that we will have a degree of capability, with the plans of our allies that we see now and which we hope will be increased, too, that by the end of the decade we will have regained a sufficient degree of strength so that we can feel some confidence in our ability to deter the newly found developing and increased capabilities of the Soviet Union.

It isn't always possible to stay with a single strategy. It isn't a matter of dismissing or ignoring earlier strategies. It is a matter of looking at the changed capabilities of the Soviets and changing our requirements to try to maintain deterrence

Senator JACKSON. Well, do I understand from what you have said that you feel that with the present strategy that you are building upon, having achieved the goal that you had in mind, as indicated in your previous statement, that you have a greater capability now and will in the period ahead to deal with more than the so-called 1½ war and short war type of assumption?

Secretary WEINBERGER. Yes; I hope we will, because I think we will have to have that capability. We have increased air and sealift, we have increased amounts for readiness and we are strengthening and modernizing the strategic deterrent. I believe that if this program can be carried out for the next few years, as we have indicated, we will have regained a capability to deter the increased capability of the Soviets which includes the ability to wage war in more than one part of the globe at a time.

### DEFENSE SAVINGS AND CUTS

Senator JACKSON. Now let me get into the critical issue here of savings and cuts that can be made. Two years ago when you had your nomination hearing you indicated at that time that any organization that has $160 billion that there has to be some opportunity for savings and obviously savings that do not affect in any way the effectiveness or the strength of our forces.

This is what people are asking over and over again, and I think you appropriately alluded to it in your remarks, Mr. Secretary. This year's defense budget request is for $274 billion in total obligational authority. Is your statement of 2 years ago equally applicable to this budget, which of course is many billions more than the figure that was discussed 2 years ago in 1981?

I emphasize this because from every quarter, Mr. Chairman, the chambers of commerce, the most conservative groups to liberal groups to what have you, they all unite. You know, when you have got that much, isn't there an opportunity for greater savings? This is your opportunity.

Secretary WEINBERGER. All right, sir, I am delighted to have it.

I spoke about a number of remarks that are prefaced about the defense budget which usually start out by saying I am all for defense, "but" in my opening statement. There is another set of statements that start out I don't know anything about the defense budget, but there must be areas where it can be cut. That is essentially, not quite, but essentially what was being said by me 2 years ago. [Laughter.]

We like to think that there have been major cuts made in the defense budget. We believe they can be documented. We know of at least $3 billion that has been made in internal management savings. That would have been $3 billion more that we would have had to seek had we not made those savings. We believe, as I have shown on the chart, that we have taken out $66 billion of the President's original request of $116 additional billion over the 3 years for which we have been proposing budgets.

There has been another $11 billion taken out of the initial plan made up last year. Part of that is due to the improved inflationary picture, part of it is due to the Government-wide pay freeze that has been proposed, and part of it is due to some programmatic changes, all of which total about $2 billion.

There are a number of things you can do, Senator. It is not a matter of anybody reporting a total inability to make cuts in the defense budget. You can cut out divisions and save perhaps $2 billion. You can cut tactical air wings and save more, depending on how many you cut. You can cancel some of the weapon systems that have billions of dollars sunk in them and you can thereby deprive yourself of having not just that weapon but any weapon of that category until you redesign and get back into production on another one. You have a number of ways in which you can reduce cost.

The quickest way to get outlay savings, as you know, is to reduce the force structure. I certainly don't think we can afford to nor should we do that, given the difference in force structures between our forces and the Soviets, even adding in our allies and adding in Warsaw Pact forces.

Yes; there are areas of waste in any large organization. We have in 2 years spent a great deal of time and effort devoted specifically to trying to eliminate and reduce any overlap, any duplication, and any unnecessary spending.

The problem is that what is left is very large. The savings don't show up because you are never going to get a negative year. The negatives that you make are always going to be netted against the large increases that you need. A large part of the increase in the number you quoted is the obligational authority to acquire the weapons over a large number of years and the obligational authority does go up at the beginning of a 5-year period if you try to budget honestly, which is exactly what we are trying to do.

So there are savings. We believe we have made a great many of them, and we can detail them down to actual dollars. Let me tell you just one. We are using a great many of the travel agencies, specials on travel now and, because of the amount of travel that is done by the Department, we save about $80 million a year by doing that. That is a small amount compared with some of the totals that we are talking about here, but it is one small example of a number of kinds of things that we are trying to do to get those savings.

My desire for spending less Government money hasn't changed one bit since 1970. We do have a different mission. We do have 10 years of neglect and 20 years of Soviet increases and that is going to require a lot of money to repair. But we have no desire to spend a nickel more than is necessary to achieve that result.

### SOVIET MILITARY BUILDUP

Senator JACKSON. Mr. Chairman, I just have one other question of General Vessey.

General, the Soviets of course continue to devote a major portion of their scarce resources to an uninterrupted buildup including the fielding of significant strategic nuclear forces as well as a massive standing military establishment. This buildup has fueled Soviet adventurism, as we know, including the invasion of Afghanistan.

Now there is no question that these developments make the Soviets a more formidable threat to our national security. But I think it is appropriate to ask the question as to whether the Soviets have any weaknesses or vulnerabilities in their military posture that are exploitable and what are they in your view that you can appropriately address in this open session?

General VESSEY. We spend a lot of time and effort looking for Soviet weaknesses and vulnerability, Senator, but I think the open session is not the place for us to discuss Soviet weaknesses and vulnerabilities.

Chairman TOWER. Senator Goldwater.

Senator GOLDWATER. General Vessey, first I want to say this reminds me of the 1930's when we were in a bad depression, we didn't have any military force and everybody wanted to cut the military budget and it took us 4 years to buy the B-17. We are right back there again looking down at trouble.

### REDESIGNING THE JOINT CHIEFS

One of your predecessors or your predecessor as Chairman of the Joint Chiefs has made several statements relative to redesigning the duties of the Joint Chiefs and particularly the Chairman. We have had some hearings, not enough, and the House I believe has passed a bill. Could you add anything from your own observation as to the need for some redesigning in the Joint Chiefs?

General VESSEY. Last summer when the House hearings were underway the Secretary asked me to have the Joint Chiefs examine the proposals that had been made by General Jones and proposals that had been made by others. We did that. We agreed that we would look at those proposals, and we spent a long time, well into the fall, examining them. We did it in a fashion that is perhaps a little different from examinations that have been made in the past.

We agreed that it was an issue that concerned the top level military advice to the President and the Secretary of Defense and the command of the forces that will defend this country. We therefore decided that we would not engage staffs in this examination, but that we, the Chiefs, alone would examine it. The Secretary and I agreed that he would also work with us when we submitted our examination without using staffs.

We did that and we submitted our recommendations to the Secretary in the fall. He has directed us to implement some of those recommendations. I should say also to you that we looked at them in two categories. We looked at them in the category of things that might require changes to the law and those that would not require changes to the law. Those that we decided would not require changes to the law and needed to be implemented, we went right ahead with and we are still pursuing many of them. Those that required changes by the Secretary, we have submitted to him and he has us working on those. We also recommended a couple of changes to the law and the Secretary has those on track.

We concluded that the duties as prescribed in the law are the right duties for the Joint Chiefs of Staff. We concluded that there were probably some better ways to do business and we have made recommendations to the Secretary.

Senator **Goldwater**. Well, thank you. I hope you will keep after that. I think our chairman is planning to have additional hearings on the subject. I personally think it is long, long overdue.

### NATIONAL SECURITY OBJECTIVES

Now in relation to your duty as a Chairman of the Joint Chiefs I look at the Secretary's statement on page 2 about national security objectives. These to me are just the natural objectives that any country, and particulary ours would have to outline our constitutional obligation to provide for the defense of our people.

Keeping in mind that the Soviet military planning is not based, in my opinion, upon our military strength, but it is based upon world economics and world politics. Those are the things that make up their mind when they are going to use military force. They believe that socialism is going to win over capitalism and that is the whole thrust of their move.

Now with that thought, do you feel that you have not only as an Army commander but as Chairman of the Joint Chiefs, a sufficient outline of strategic planning to enable you to do your job as completely as you would like to do it? In other words, we have one tank that we use every place. We have aircraft that we use in any number of situations and ships the same way.

What disturbs me is that I don't believe we have ever had, at least in my days, any outline of the way we go about it. We sort of stumble along and we find ourselves in trouble and we do all right, but I think that you in your job and we in our job might feel better if we had some better understanding of just what the strategic planning is and what the tactical support of that strategic planning is. Would you agree with that?

### STRATEGIC PLANNING OUTLINE

General **Vessey**. I agree with the need for a clear outline for strategic planning. For us in the Joint Chiefs of Staff, we have a reasonable outline of what we need to do in strategic planning and we are pursuing that outline. I think that the fact that our goal is defense and preservation of our security from outside attacks, is one of the things that requires that we have to face contingencies in the world that either are unexpected or unforeseen. It certainly gives the impression that we have to be reactive instead of proactive.

But the fact of the matter is we need a long-term strategy for defense. I believe that we have a reasonable long-term strategy for defense. We need a long-term commitment by the people of the United States to the maintenance of that strategy.

Senator **Goldwater**. I thank you and I hope you will pursue that. I assure you that members of this committee will pursue this objective that we have long been seeking.

Thank you, Mr. Chairman.

Chairman TOWER. Senator Stennis?

Senator STENNIS. Mr. Chairman, I plan to attend your afternoon session. You are going to have an afternoon session, are you not?

Chairman TOWER. Yes.

### GUARD AND RESERVE

Senator STENNIS. I would like to see all the Members have a chance to ask questions. I am going to pass up a large part of this extensive budget, Mr. Secretary, and ask a few at-home questions, so to speak, on our Guard and Reserve.

I have been to these installations and I have been proud. I think you would be proud also, and when you can visit them I hope you will. There are some splendid units you have among the Guard and Reserve. I visited some where I know enough of those men to know that they really represent quality and a fine degree of dedication, and the spirit of things they are instilling into the men is highly commendable.

I think I know, too, that the military gets a great deal of its public understanding and support, not from you men at the top, but from these men in these local units that go to make up these units and have their influence in that home community. They are part of the community life—they are interested in the schools, the churches, and everything about their community. They have a tremendous impact on public opinion.

The point I am getting at is I can't understand why you people don't give them more money. I am not talking about fancy planes or equipment of that kind, but for the ordinary things that they need in the field in their training units at home. I described it once as saying they need more equipment that still has at least some of the factory paint left on it. [Laughter.]

If it has just a little of that factory paint it encourages them. The Congress put in $50 million in the Guard and Reserve budget the year before last and $125 million extra beyond the budget in fiscal year 1983. Now, I can hardly expect you to know the details of your plans to use that money, but I notice you didn't put in any money in along that line for fiscal year 1984. I am not trying to give you a lecture. I know better than that.

Secretary WEINBERGER. There may be a little confusion, Senator. First of all, I would say that I share completely your feeling as to the importance of the Guard and the Reserve, and I know what a key role they would play if we would ever have to go to mobilization. I have had the privilege of touring and inspecting a number of these units and seeing some of the new M-60 tanks that have been issued to them in the South and the refitting of other equipment. Some of the tanks are brand new with the factory paint on and some have been refitted.

We are budgeting for 28,000 additional people and we have added roughly $500 million in this budget for equipment for them. We have transferred ships and aircraft to the Reserve and I hope this will be borne out by your discussions with members of various Reserve associations. We have added a very substantial amount more than has been done in the past because we recognize the extreme importance of this part of the Armed Forces. With an additional 28,000 people coming in and with this approximate one-half billion dollars for additional equipment for them, I think we are proceeding along the path that you desire.

I should also add that we have, and this is a very gratifying indication of the things that General Vessey mentioned in his statement about the improved manpower situation, we have a very large number of additional applications for ROTC courses in the colleges and additional ROTC scholarships that we are making available.

So I would say that the Reserve and Guard picture is fully as important as you say, and we attach the same priority you do to it, but we are doing something about it and these requests are in the 1984 budget.

Senator STENNIS. I am encouraged about what you say. Now is this going to be a part of your definite policy and your personal promises to pursue this particular item in this field?

Secretary WEINBERGER. Yes, I would be just as stubborn as I am supposed to be about everything else about the Guard and Reserve funds. I think it is extremely important that we keep them all the way through.

Senator STENNIS. They haven't been propagandizing me. I go and seek out these special units especially that I hear about, and I am amazed to find you have these units that go to Germany every year for several weeks, for instance.

Secretary WEINBERGER. Yes, and they do extremely well, too.

Senator STENNIS. We have those in Mississippi and we have Guard units there whose records are splendid, just splendid, and they are manned by highly competent officers, noncommissioned officers.

Well, I am going to keep on if you say that is a major part of your policy.

Secretary WEINBERGER. It is, indeed, yes, sir.

Senator STENNIS. You have a way of meaning what you say and I thank you.

Mr. Chairman, I yield now.

Chairman TOWER. Senator Warner.

Senator WARNER. Mr. Secretary, there is an old quote going back to the time of the Constitutional Convention in 1789, "Nothing in this world is certain but death and taxes." In my humble judgment you can add there is nothing in this world certain now but death, taxes, and a cut by Congress in defense spending.

### PROPOSED DEFENSE BUDGET FACES CUTS

That put, in my judgment, a very heavy burden on this committee, the members collectively, individually, and yourself to try and guide that reduction given this certainty in a way that least endangers a degradation in our national defense. The battleground is going to be between that deficit nearing $200 billion and the proposed defense budget.

With all due respect to my colleagues, I don't think this is driven by just a frenzy or a irrational action. It is a genuine concern among the Members of the Congress that if there is to be a further curtailment in Government spending, then defense cannot be exempt.

Now I think the President, and I have supported him and will continue to support him, has in a very bold and courageous manner guided this Nation on a course to restore our defenses. The question is the rate of buildup and can we sustain some reduction in that rate in order to improve things here at home in the short term.

I share the view that in the long term the defense trends are adverse to this Nation and absent a buildup like that initiated by the President and yourself that those defense trends will become worse. But the word survival was used and, indeed, I think people are looking at survival here at home and in the near term of the next year to 18 months, and what is the military threat to our United States versus the threat of further deepending of the recession and the loss of jobs, health, education, and the like.

So we come down to the question of guidance this committee should give by way of leadership, and I would like to make a suggestion because I feel frankly, Mr. Secretary, that our defense in reality can be no stronger than the foundation on which it rests and that foundation is our Nation's economy and the vitality of its people.

So let me give you one suggestion and see whether in turn you can give me some guidance. First, the cuts, if they are to come, have to generate dollars I think in the next 12 to 24 months. You can look at the procurement account and you can cut the B-1 and the MX and you can cut a whole lot of programs and generate very few dollars in savings. Then you can turn to the personnel account. There, you can cut back some of the progress that was essential to restore or close, the comparability gap between the ability of a man or a woman in uniform to receive a fair and just compensation with his or her civilian equivalent.

In my judgment, we cannot reopen that gap, but should try and look at an alternative means in the personnel account to generate dollars. As painful as the question may be, I address it to you in the form of an end strength cut, somewhere in the area of 5 to 6 or 7 percent across the board in all the services.

Organizations in our civilian economy are having layoffs and in a sense their end strengths are being cut. Now could you not do that in a way that you cut end strength on active duty and give the option to those personnel to transfer to the Guard and Reserve and thereby minimizing in some respects the impact of a personnel cut?

Secretary WEINBERGER. You could do it, Senator, but I think it would be a very wrong course to follow, however, and I think that the premise that you stated as the reason for the necessity of doing it is fundamentally in error, if you will permit me to say so.

### REGAINING MILITARY STRENGTH

The deficits are very large. Nobody likes them. Everybody wants to do something about it, and the President has set forth a rather comprehensive plan for trying to deal with those deficits. The chairman and others who have spoken this morning have spoken about the importance of regaining sufficient military strength and doing it in time and doing it as inexpensively as we possibly can. But we don't have the luxury, or the ability, if you like, of doing it in a sort of a vacuum, without recognition of the kind of a world we live in or of the kind of policies forced on us by our potential adversaries.

The assumption is that if you make cuts of the kind you talked about in force strength or in weapons or in any one of a number of other areas, you would reduce the defense budget and thereby reduce the deficit. You would not reduce the deficit dollar for dollar by reducing defense spending. You would lose tax revenues, and you would lose a lot of associated impact in the economy and improvement in the economy which generates additional tax revenues.

I hasten to put as a preface to all these remarks now that this is not a justification for defense spending. I do not believe you should do defense spending for any other reason other than to meet the threat that is there, but it is quite wrong I think to say that defense spending hurts the economy.

You don't spend for defense purposes to help the economy, but it would be wrong to ignore the fact that it does help the economy. It does produce tax revenues, and it does produce employment. There are hundreds of thousands of jobs involved in the defense budget. Again, that is not a reason to do it. You do it because you have to, because of the threat and the necessity. But for each $1 billion of defense spending that is cut, you lose about 35,000 jobs, resulting in associated unemployment insurance costs and other payments that have to be made are lost as well as a loss of tax revenues. So your deficit does not go down.

If you cut defense spending by $1 you probably can cut your deficit by about 50 cents. But when you do that, when you cut defense spending by the amounts that you are talking about or when you reduce force structure, which is already far behind that of potential opponents and not sufficient to enable us to meet our commitments in various parts of the world, I would have to ask whether or not you had given full consideration to what you would be doing to the domestic economy. Which of the commitments that we have should we give up. Should we give up the concern about the events in the Carribean, should we give up commitments to South Korea, to Japan, or should we give up our commitments to NATO Europe?

These are the factors that compel us to present the budget that we have and that have led the President to recommend to you the budget that he has for the last 2 years and the budgets that he projects for the next 5. They are not conditions of our making.

As we have said before, these are not popular expenditures, but I can certainly not tell you in any kind of conscientious way—fulfilling the responsibilities that I hold—that reducing the force structure, cutting our divisions, cutting out tactical air wings, and not completing ships so that we won't have to put them to sea and require additional manpower to man and sail them, is going to leave us with the type of defense that I think, is absolutely essential in the world that we have right now and in the world we will have in the foreseeable future.

Senator WARNER. Well, Mr. Secretary, you know down in Virginia they say there stands Jackson like a stone wall. We have got to give some guidance I think in this situation. Maybe I am wrong, that the Congress will not cut $1 below what you and the President recommended. Now I am just asking you point blank, given the option of cutting programs and recognizing, based on some experience I have had in the building where you are, how difficult it is to revive those programs and how costly it is to cancel programs and pay the contractual penalties for the cancellation of those programs versus some modest reduction in personnel in order to meet the demands of the Congress for some reduction, which is best, reduction in the procurement account or reduction in the personnel account?

## CUTTING DEFENSE BUDGET NOT THE ANSWER

Secretary **Weinberger**. Senator, you would want me to tell you conscientiously what I think, and I have to tell you again that I don't think cutting either one of them is a proper or a prudent course for us to follow. Of course, we can take your statement of a little earlier, that it is certain that there will be cuts made, as a self-fulfilling prophecy if everybody who makes that statement goes along and supports cuts.

On the other hand, I would again suggest very respectfully that the true test of leadership might be, as the chairman suggested a moment ago, not to try to find ways in which we can comply with a current demand for reductions made blindly or without any consideration as to whether they are going to help or harm our security, and simply make them because cuts have to be made and we have to get a tidier bottom line on the budget. That I think is not fulfilling the responsibilities that I have and I can't conscientiously tell you that we can or should give up some divisions, or not complete some ships in the ship construction program so we don't have to send people to sea, or cut out tactical air wings.

We have reached this point, as General Vessey said, after 2 years and after a long period of prior difficulties in which the quality and the numbers of the force were going rapidly downhill, in which a number of people were talking about the necessity of a draft because the All-Volunteer system wasn't working, a situation in which the manpower situation is more than satisfactory. It is very good. It is one of our best accomplishments.

Senator **Warner**. I don't mean to cut you off. I recognize that, Mr. Secretary.

Could General Vessey have the opportunity to answer if you are faced with cutting programs versus some modest force reduction and transferring that to the Guard and Reserve which is the least harmful to our overall security in a long-term situation?

General **Vessey**. I can't help but support the Secretary. I am not in favor of either one—if you cut programs you mortgage the future. If you cut weapons programs it means that you are not going to have those particular weapon systems in the future. If you cut force structure today or cut the end strength today, in a sense certainly you reduce the readiness today, but in a sense you also mortgage the future. It is perhaps a nearer term feature than cutting long-term weapons acquisition programs. So when one is faced with that, one has to look at the size of the cut and then assess which is more dangerous to the Nation.

Senator **Warner**. Thank you, Mr. Chairman.

Chairman **Tower**. Senator Nunn?

Senator **Nunn**. Thank you, Mr. Chairman.

Mr. Secretary, first let me congratulate you on taking the initiatives you have taken in NATO, and the presentation you made to the NATO Defense Ministers. Your emphasis on new mobilization capabilities, communications, intelligence, mobility of forces, and precision munitions, are all going to pay large dividends in the future.

Secretary **Weinberger**. Thank you.

### 1984 MUNITIONS BUDGET

Senator **Nunn**. Could you tell us if this 1984 budget, Mr. Secretary, contains those munitions that are so important? Do you have new initiatives in the munitions area in this budget?

Secretary **Weinberger**. We do, Senator. We have made starts on both the new munitions the NATO Ministers are examining and additional munitions referred to as smart. Those are beginning and provisions have been made to start them.

Senator **Nunn**. Could you break out for the record what is in this year's budget and in your 5-year defense plan?

Secretary **Weinberger**. We will indeed supply that for the record.

[The information follows:]

### NONSTRATEGIC MUNITIONS

The nonstrategic munitions include all missiles (less strategic) and all ammunitions (bombs, cartridges, projectiles, etc.)

The new procurement initiatives for nonstrategic munitions in this year's budget are as follows:

NEW INITIATIVES IN NONSTRATEGIC MUNITIONS IN FISCAL YEAR 1984 BUDGET

[Dollars in millions]

| Program | Fiscal year | | |
|---|---|---|---|
| | 1984 | 1985 | 1986–88 |
| 81mm improved cartridge | 5.1 | 162.9 | 908.6 |
| 120mm tank ammunition | 64.8 | 177.8 | 1,135.7 |
| Light antitank system | | 132.6 | 442.0 |
| Rolling airframe missile (RAM) | 13.4 | 23.5 | 188.1 |
| Sidearm | | 1.0 | 32.0 |
| Low level laser guided bomb (LLLGB) | | 35.0 | 111.8 |
| Bigeye (binary chemical bomb) | 43.2 | 154.9 | 655.1 |
| 155mm binary chemical munition | 18.1 | 95.1 | 208.6 |
| Advanced medium range air-to-air missile (AMRAAM) | 62.6 | 427.4 | 2,935.9 |
| 5-inch guided projectile | 45.0 | | |
| 16-inch ammunition | | 4.6 | 17.3 |
| 9mm ammunition | 2.8 | 13.6 | 43.6 |

Senator **Nunn**. General Vessey, there is, as Senator Warner has observed, an awful lot of feeling that the defense budget is going to be cut. I don't expect you or Secretary Weinberger to come here this morning and advise where the cuts would be made, but I do think we are going to need a close working relationship as this process evolves, or otherwise this committee will find itself playing very little role in deciding the defense makeup. The Appropriations Committee, as they did last year, will make the final decisions on some form of continuing resolution at the last minute of the session and I do not believe that is in the best interests of our national security.

So I would say to you, General Vessey, and you, Mr. Secretary, that I think it is essential that we have a close dialog as this process evolves because as much as you are against defense cuts, I think you are also against seeing those cuts done in very foolish way that would further degrade the military capabilities you seek.

### FREEZE ON DEFENSE SPENDING

General Vessey, with that as a background; would you tell us in your personal opinion the result of a freeze? Some people are talking about a freeze on defense spending, that is keeping the same level this year that was in last year's budget. What would you believe to be the result of that in terms of our military capabilities?

General VESSEY. Well, again, what it would do would be to disrupt ongoing improvement programs and make those programs stretch and obviously cost more to the Nation.

Senator NUNN. Are you saying then it would be taken out of procurement?

General VESSEY. It is yet to be determined how you take it out. I would simply say that it is going to disrupt ongoing improvement programs and make those programs cost more. Now whether it is taken out of readiness improvement programs or procurement improvement programs, it will still move it out into the future and make it cost more.

### FORCE STRUCTURE READINESS VERSUS PROCUREMENT

Senator NUNN. Do you have an order of priorities between force structure readiness and procurement on terms of which you feel is the most essential in this year's budget if one or the other is going to be cut?

General VESSEY. No, I don't. I guess you have heard me say it before, Senator, that I think that force structure, readiness, and procurement, as we define in our budgets, is a handy way of looking at things, but it is an unholy division. As a matter of fact, force structure procurement, and readiness are tied together. It is hard to separate those three.

I think that if one is forced to make cuts, one has to look at how to come up with a balanced program that looks at both today and the years ahead, and I wouldn't give a priority until I looked at the size of the cut.

### POSTPONING TAX CUT

Senator NUNN. Mr. Secretary, if your defense budget is in great peril as we approach the decisions in the budgetry process or Congress would you consider advising the President of the United States to postpone in the third year the tax cut?

Secretary **Weinberger**. No, sir, I would not. I don't think that would assist in any way with the economy, which as the chairman and Senator Jackson both mentioned. It is the recession that has caused a lot to people to be worried about whether or not we are capable or making the necessary defense expenditures. I think if you eliminated the third-year tax cut, you would be signaling to the country that we would be going back to old policies that involved something other than growth in the economy, and I think that would be very counterproductive. That, however, is not my department.

Senator **Nunn**. Do you subscribe to the theory that the crucial years in terms of getting the deficit down are not so much fiscal year 1984 but rather fiscal year 1985, 1986, and 1987, or do you believe that the deficit overall, and I am not talking about defense, should be primarily focused on this year?

Secretary **Weinberger**. No; I think you have to look at every year all the way out, and every year you have to do what is necessary to try your best to make reductions or spend the minimum amount of additional funds keeping in mind the deficit. Everybody shares the feeling that it is very unfortunate and too large and something that we all want to reduce.

You have to consider everything that goes into making up that deficit, and what are some of the forces and factors driving it. As I tried to indicate in my response to Senator Warner, I don't think you will find that defense spending is one of the things that causes the deficit nor would reducing it cure it.

### ZEROING OUT MILITARY PAY RAISES

Senator **Nunn**. Well, having said that, does it make any sense to you to zero out the military pay raises this year and then in your posture statements say that you are going to try to add them back next year?

Secretary **Weinberger**. It does make sense, Senator, but only in the context of a Government-wide program. If you are going to have a universal program of personnel cost freezes, freezes in benefits from the Government, social security beneficiaries, and retirees to try to stay even, with the inflation down as far as it is, it is less of a burden than it might otherwise be, but it still is a burden. If you are going to have a program of that kind, it does indeed have to be universal. You can't start making individual exceptions.

The President indicated in his state of the Union message how much he regretted the necessity of asking that to be applied to the military. That certainly is a feeling I share, and I think it is important that we try to set aside sums in the 1985 budget to make this up because it is vital that we not start falling behind again as the situation was when we arrived, the situation which you and others have tried to deal with in past years and did take the lead, as I indicated, in the end of 1980 before we even got here. So it is vital to keep that up, and this I regard as a 1-year lapse that I hope very much can be made up in 1985.

Senator **Nunn**. The result of that would be decreasing the expenditures in a period of recession and increasing them as hopefully the recovery starts. Let me go on to another subject. The words defensive, deterrent, collective defense, limit the scope of the conflict, limit the duration of the conflict, and limit the intensity of the conflict appear repeatedly in this year's policy statement and posture statement in respect to strategy.

Secretary **WEINBERGER**. Yes.

### DEFENSIVE STRATEGY

Senator **NUNN**. I am not saying some of those words weren't present last year, but I think they are repeated a lot more this year than they were last year. Does this mean that we are seeing a change in strategy or a change in emphasis?

Secretary **WEINBERGER**. No, I think, Senator, that we tried to emphasize, and there are a number of other words in the report that are used frequently that try to emphasize the continuity in the whole policy that has taken place really since the end of World War II. In American policy we never had an offensive strategy. We have a defensive strategy. We are very desirous of maintaining the peace and not starting conflicts, and we think the best way to maintain peace is through pursuit of two roads. One is sufficient strength to deter an attack and the other is to pursue vigorously, as we are doing at Geneva, negotiations to reduce the levels of armaments so that deterrence can be maintained in a balance at vastly lower levels. We are pursuing both paths.

I don't believe there is anything except continuity in the basic structure of our strategy and policy, but there is a changed Soviet capability, as I mentioned earlier.

Senator **NUNN**. Let me interrupt you there because I know I am going to run out of time and I want to ask a couple more questions along that line.

Secretary **WEINBERGER**. Yes, sir.

### LONG-TERM GOAL

Senator **NUNN**. In last year's posture statement and again in this year's posture statement you have the quotation, and I will quote:

> Our long-term goal is to be able to meet the demands of a worldwide war, including concurrent reinforcement of Europe, deployments to Southwest Asia and the Pacific and to support other areas. Given the Soviet capability to launch simultaneous attacks in Southwest Asia, NATO, and the Pacific, our long-range goal is to be capable of defending all theaters simultaneously.

Mr. Secretary, could you now give a range of what you mean by long-term goal? Are you talking about a 5-year plan, a 10-year plan or what are you talking about?

Secretary **WEINBERGER**. I tried to mention earlier, Senator, that I believe by the end of this decade we will have acquired sufficient deterrent strength so that we could be in that position as long as we can maintain it. However, to maintain it is a very long and expensive operation, too.

### ACHIEVING DETERRENT STRENGTH

But I would believe that by the end of the decade, following the path that we have outlined in the budget for the succeeding years, we would achieve that degree of deterrent strength. It will not be a matter of military superiority. We are not talking about that.

Senator **Nunn**. I am not talking about that. I am talking about just that specific statement, and you think we will achieve that capability in this decade?

Secretary **Weinberger**. By the end of the decade, because again the statement, as you know, refers to the fact that we are not alone in this endeavor nor can we be, that it is a collective defense we are talking about. We try to encourage, to the greatest extent we can, our allies.

Senator **Nunn**. Your long-term definition then is trying to complete that goal this decade?

Secretary **Weinberger**. Yes; I would like very much to be able to do that. When you say "complete," again you have to bear in mind that there are critically important maintenance and modernization things that do have to go on all the time. But I would think we would be in that general kind of a position by the end of the decade and we have some things that will carry out into the 1990's, some of the more advanced bombers and so on, and all that will add to it.

Senator **Nunn**. Thank you.

My time is up, Mr. Chairman.

Chairman **Tower**. Senator Humphrey?

Senator **Humphrey**. Thank you, Mr. Chairman.

### STRONG LEADERSHIP ESSENTIAL

Mr. Secretary, there has been a lot of talk in the press and elsewhere lately about a new spirit of accommodation of cooperation and ecumenical spirit in the administration and I don't know that that is true, but I hope it isn't because I think what is needed at this juncture is strong and clear and decisive leadership.

This middling, piddling, split-the-difference kind of leadership that has been urged upon the President is wrong. I am convinced of it and I hope that he will not be pushed into that posture by the press.

For your part, Mr. Secretary, you have been splendid, and I thank you and commend you for your courage and your steadfastness under fire. Few Americans realize how the game is played here in Washington and how nasty and vicious and sometimes personal it can be, and we saw something of that nature this morning with regards to you.

So I commend you. I think you are doing a fine job. If Congress must make mistakes, fine, but don't be pushed into bed with us by this pressure that we see mounting in the press. I hope that you will stick to your beliefs.

Secretary **Weinberger**. Thank you very much, sir.

### WHY THE NEED FOR MORE DEFENSE SPENDING

Senator **Humphrey**. Mr. Secretary, one of the questions asked of me by my constituents goes something like this: Well, why do we constantly need to spend more on defense? For heaven's sake, we already can destroy the Soviets five times over, and so on. How do you answer that question for the American people?

Secretary **Weinberger**. Well, sir, to carry out any such action would involve an attempt to, first of all, begin a nuclear war; and second, to use missiles that do not have the capability of destroying a great many of the hardened Soviet targets, and they have hardened, as you know, some of the most valuable of their military targets. It would involve beginning a war we were certainly not prepared to carry out to the extent necessary to destroy that country one time over, let alone five times over.

It also totally ignores the retaliatory capability of the Soviet Union, which is enormous and almost entirely offensive in character anyway. So that it is, I think, a totally unrealistic kind of argument. It is an argument which looks at numbers of warheads regardless of age, regardless of objective, regardless of mission, regardless of capability and says oh, we have about the same number of warheads they do so we don't need anything more.

When you look at what they have acquired in the last 20 years: the accuracy, the yield, the high degree of sophistication and the survivability of their weapons and weapons systems and the enormous amount they have spent on air defense, which in effect will make our B-52's no longer able to penetrate after a year or so, and at the amounts they are spending on civil defense and yet a lot of people say that that is absurd and it won't work. The important thing is that they seem to think it will work and they are spending a great deal on it. That is a perception of what their intentions are.

I would say to them, Senator, simply that that is unfortunately a statement that is no longer in any sense correct and requires a totally unacceptable activity on our part and in effect negates all of the things that we want to do which is to deter war and to reduce the level of armaments as we have done unilaterally in some areas over the past few years.

Senator **HUMPHREY**. So those who would have us curtail defense spending on the argument that we have the power presumably to destroy Soviet assets many times over, in fact make that kind of war more likely by withholding the funds to (a) prevent war in the first place, and (b) to fight it successfully on a conventional level.

Secretary **WEINBERGER**. Exactly. Your only option is some sort of hair-trigger attack which brings the world right to the brink and is frankly one of the most perilous courses that we could follow. I totally agree with you.

### NUCLEAR BOMBS AND WARHEADS

Senator **HUMPHREY**. Let's discuss another common misperception, Mr. Secretary, that I have discovered. Most Americans have the impression that our arsenal of nuclear bombs and nuclear warheads for missiles has been steadily climbing year after year after year and that President Reagan and Secretary Weinberger want to raise that line even further on the chart. Can you tell us about that?

Secretary **WEINBERGER**. No, it has been steadily decreasing all of this time Senator. What we feel is essential to do, is to get some modernization in and additional accuracy so that we will be able to maintain our strategic deterrent. The whole point of the MX missile is that it has 10 warheads and a great deal of accuracy and a yield that can deal with Soviet hardened targets, and a lot of our submarine current weaponry and missiles do not have that. The B-

52's will not be able to penetrate very much longer, and the Minutemen missiles do not have that capability. It is a matter of acquiring the kind of strength that can deter an attack.

Senator HUMPHREY. Yes; you said that in fact our arsenal is not increasing but it is declining.

Secretary WEINBERGER. It is declining. We are phasing out Titans, we are taking out of production a lot of tactical——

Senator HUMPHREY. I am talking about the warheads now and not the delivery vehicles but the warheads that do the destruction.

Secretary WEINBERGER. Yes, sir, warheads, right.

Senator HUMPHREY. If you look at a graph of our arsenal of total nuclear weapons, bombs and warheads, it peaked in the early 1960's, did it not? It is not going up, but it has been coming down steadily for 20 years.

Secretary WEINBERGER. It is down by about 40 percent actually.

Senator HUMPHREY. Yes, we are about 40 percent below our peak in numbers of nuclear warheads and bombs. Now that is something that most people don't know. They think President Reagan wants to add more bombs and warheads to our arsenal on top of more bombs and warheads. That is not the case in either in numbers of those weapons or their total megatonnage.

Secretary WEINBERGER. That is correct.

### 1984 BUDGET BREAKDOWN

Senator HUMPHREY. Mr. Secretary, what percentage of this 1984 budget as proposed would be devoted to nuclear weapons?

Secretary WEINBERGER. About 13 percent.

Senator HUMPHREY. So 87 percent, is it fair to say, goes to conventional warmaking capability?

Secretary WEINBERGER. The majority of our remaining resources are devoted to conventional capability. However about 15-20 percent of the budget supports activities that cannot be allocated between nuclear and conventional.

Senator HUMPHREY. What percentage of this budget goes to people costs, Mr. Secretary?

Secretary WEINBERGER. Well, it is about 44 percent, and it has gone down because of the proposed personnel pay freeze and because the total budget itself has gone up. The comparable Soviet figure is about 15 percent.

Senator HUMPHREY. What is encompassed in that 44 percent? Are you talking about salary or pensions?

Secretary WEINBERGER. That would be pay, health costs, and various fringe benefits for the troops, and pensions.

Senator HUMPHREY. Forty-four percent for pay and benefits.

Secretary WEINBERGER. It is about 37 percent in actual payroll and the balance are the things I have described.

Senator HUMPHREY. Now what about training costs, if you include training costs in the category of people costs?

Secretary WEINBERGER. Well, then, you would get it well over 50 percent, probably about 53 to 57 percent this year around in that range.

Senator HUMPHREY. In the high 50's, 57 percent perhaps.

Secretary WEINBERGER. Yes, sir.

Senator **Humphrey**. Therefore, the illusion or the perception that many Americans have that the bulk of our defense budget is going into the purchase of more weapons systems is a misperception.

Secretary **Weinberger**. It is quite wrong, yes, sir.

Senator **Humphrey**. Mr. Chairman, I have no other questions at this jucture. Thank you.

Thank you, Mr. Secretary.

Chairman **Tower**. Senator Levin?

Senator **Levin**. Thank you, Mr. Chairman.

Good morning, Mr. Secretary and General Vessey.

### BALLISTIC MISSILE WARHEADS

First of all, before I have a brief statement, I would like to just correct the record in terms of ballistic missiles warheads.

Are you saying that the United States had fewer ballistic missile warheads in 1981 than it did in 1970?

Secretary **Weinberger**. Fewer nuclear warheads, Senator.

Senator **Levin**. Fewer nuclear warheads, is that what you are saying?

Secretary **Weinberger**. Yes, sir.

Senator **Levin**. I would like to put a table of the Library of Congress, Mr. Chairman, into the record at this point showing that in 1970 we had 1,874 ballistic missile warheads. The Soviet Union had 1,716. Then in 1981 we had 7,128 missile warheads, and Soviet Union had 6,735. So that we not only had dramatically more warheads in 1981 than we had in 1970, but actually more than the Soviet Union.

Chairman **Tower**. That will be placed in the record.

[The table follows:]

TABLE 8.—STRATEGIC OFFENSIVE RECAPITULATION

[Report No. 82-162 S]

| | 1970 | 1971 | 1973 | 1975 | 1977 | 1979 | 1981 | Net change 1970-81 |
|---|---|---|---|---|---|---|---|---|
| LAUNCHERS: | | | | | | | | |
| United States: | | | | | | | | |
| ICBM | 1,054 | 1,054 | 1,054 | 1,054 | 1,054 | 1,054 | 1,052 | −2 |
| SLBM | 656 | 656 | 656 | 656 | 656 | 656 | 512 | −144 |
| Bombers | 469 | 501 | 463 | 396 | 376 | 376 | 376 | −93 |
| Total | 2,179 | 2,211 | 2,173 | 2,106 | 2,086 | 2,086 | 1,940 | −239 |
| Soviet Union: | | | | | | | | |
| ICBM | 1,427 | 1,489 | 1,547 | 1,607 | 1,477 | 1,398 | 1,398 | −29 |
| SLBM | 289 | 401 | 589 | 741 | 970 | 989 | 1,017 | +728 |
| Bombers | 145 | 145 | 145 | 155 | 175 | 207 | 235 | +90 |
| Total | 1,861 | 2,035 | 2,281 | 2,503 | 2,622 | 2,594 | 2,650 | +789 |
| U.S. Standing | +318 | +176 | −108 | −397 | −536 | −508 | −710 | −1,028 |
| WEAPONS: | | | | | | | | |
| Ballistic Missiles: | | | | | | | | |
| United States: | | | | | | | | |
| ICBM | 1,074 | 1,274 | 1,754 | 2,154 | 2,154 | 2,154 | 2,152 | +1,078 |
| SLBM | 800 | 1,664 | 3,824 | 4,688 | 5,120 | 5,120 | 4,976 | +4,176 |
| Total | 1,874 | 2,938 | 5,578 | 6,842 | 7,274 | 7,274 | 7,128 | +5,254 |

TABLE 8.—STRATEGIC OFFENSIVE RECAPITULATION—Continued

[Report No. 82-162 S]

| | 1970 | 1971 | 1973 | 1975 | 1977 | 1979 | 1981 | Net change 1970-81 |
|---|---|---|---|---|---|---|---|---|
| Soviet Union: | | | | | | | | |
| ICBM | 1,427 | 1,489 | 1,547 | 1,937 | 2,407 | 4,186 | 5,302 | +3,875 |
| SLBM | 289 | 401 | 589 | 741 | 1,130 | 1,309 | 1,433 | +1,144 |
| Total | 1,716 | 1,890 | 2,136 | 2,678 | 3,537 | 5,495 | 6,735 | +5,019 |
| U.S. Standing | +158 | +1,048 | +3,442 | +4,164 | +3,737 | +1,779 | +393 | +235 |
| Bombs/ASM's: | | | | | | | | |
| United States | 1,868 | 1,872 | 2,130 | 2,602 | 2,534 | 2,534 | 2,534 | +666 |
| Soviet Union | 145 | 145 | 145 | 165 | 205 | 269 | 325 | +180 |
| U.S. Standing | +1,723 | +1,727 | +1,985 | +2,437 | +2,329 | +2,265 | +2,209 | +486 |
| Grand Total: | | | | | | | | |
| United States | 3,742 | 4,810 | 7,708 | 9,444 | 9,808 | 9,808 | 9,662 | +5,920 |
| Soviet Union | 1,861 | 2,035 | 2,281 | 2,843 | 3,742 | 5,764 | 7,060 | +5,199 |
| U.S. Standing | +1,881 | +2,775 | +5,427 | +6,601 | +6,066 | +4,044 | +2,602 | +721 |

## COLLISION COURSE ON CUTTING THE BUDGET

Senator **Levin**. Mr. Chairman, it seems to me that the President and the Congress are on a collision course in defense spending. It is likely to be more of a sideswipe than a head-on collision, but to me the issue isn't whether we are going to cut, but the issue is how much and where.

When you have the Republican leader of the Senate saying that $15 billion in cuts and outlays is not enough, it seems to me that we are clearly embarked on a critical decision. That decision is where are we going to make the cuts and how much are we going to cut. It is not simply good enough for the Secretary of Defense to be saying that any further cuts such as are proposed by Senator Baker are going to jeopardize national security.

Now the administration justifies, with exaggerated rhetoric and with one-sided charts the position that any cuts will jeopardize national security. It then labels anybody who wants to get into the issues of where we are strong and where we are weak and where we should be stronger, in other words, the question of how to maximize our defense dollars and where we can make cuts if we have to, label those folks as defense "buts".

We have got to reverse the self-defeating course that we are on of stubbornly clinging to the procurement of several unnecessary strategic nuclear weapons programs, the MX missile and the B-1 bomber, while we are insufficiently funding our conventional forces. And, by the way, if we cut the MX missile and the B-1 bomber we would save billions this year in outlays.

Totally eliminating a pay raise needed to keep our skilled, experienced enlisted personnel in the services while we are underfunding the military's depot maintenance programs, the Navy's flying hour programs and the Army's training ammunition allotment demonstrates wrong defense priorities in my opinion.

The wasteful big ticket procurement programs will not only produce merely marginal military results, and late in the decade at that, but they also represent a threat to our economy and indeed a threat to our military readiness. They also, and this is critical, represent a significant increasing proportion of the annual defense budget becoming uncontrollable in future appropriation years because the dollars for these big ticket programs would have been committed in prior years.

In fiscal year 1981 that uncontrollable percentage of the defense budget was only 28 percent of the total outlays. Under this administration's plans, this percentage is expected to grow to about 41 percent by fiscal year 1987, a growth of almost 50 percent.

What this shift in outlay patterns means is that any expected future cuts are going to be even more directed against the readiness and sustainability programs which make up most of the controllable part of the annual military budget.

Congress is almost as much to blame for this as the administration because we have approved those big ticket items and others such as the two nuclear aircraft carriers in 1 year. Unless we are willing to rescind our previous approval or to stretch out some of these programs, it will be the readiness accounts which will have to absorb expected cuts.

I would hope that we will prevent these false economies in readiness, and it would be helpful, Mr. Secretary, if the administration would stop stonewalling the Congress about defense priorities and about where further reductions can be made in the fiscal year 1984 DOD budget.

Secretary WEINBERGER. Well, Senator, is that the question and do I have an opportunity to comment on it?

Senator LEVIN. You made an opening statement without asking me a question so I thought I would make an opening statement without asking you questions.

[The prepared statement of Senator Carl Levin follows:]

### PREPARED STATEMENT BY SENATOR CARL LEVIN

When the Reagan administration took office two years ago, it promised the American people a more credible military posture and a more coherent defense policy. Instead, it has created a defense policy which charts a course that threatens to destroy our military readiness in the future.

The administration's over-emphasis on procuring too many militarily-dubious, expensive weapons systems too quickly—thus incurring huge, initial financial obligations—unduly restricts Congress' flexibility to make the additional cuts in the fiscal year 1984 defense budget we know are coming without gutting the combat readiness accounts.

Instead of offering reasonably increased defense budgets representing the hard, priority-setting choices which must be made if America is to afford a realistic, effective military posture, it has produced bloated defense budgets which ensure our resources will be exhausted before we improve our military capabilities as needed.

Instead of correcting some of the Pentagon's most archaic procurement practices which restrict competition among defense contractors, it has fought even the most modest efforts aimed at applying "free market" principles to the government's largest acquisition budget.

The end result is a defense program with little credibility, of which the fiscal year 1984 defense budget is a prime example. By providing a 10-percent real growth rate while the rest of the Federal budget declines in real terms, and by over-emphasizing strategic nuclear weapons procurement, this budget threatens to extinguish what is left of the faltering national consensus to strengthen our military in truly needed areas.

The Reagan administration is the victim of its own exaggerated rhetoric about the military needs of this nation and about the appropriate size of the annual defense budgets required to meet those needs sufficiently. It is time to bring this Administration down to earth, where $200 billion deficits and an economy struggling to break the grip of the recession jeopardize our national security just as do the Soviet Union and its Warsaw Pact allies.

The American people—as evidenced by recent polls, increasing calls from the business community (including major defense contractors), and statements by leaders of the President's own party and the Democratic party—recognize the requirement to restrain all Federal spending, without exceptions, to sensible levels.

It is time for the Reagan administration to stop fooling itself in this area and work more closely with Congress to draft a defense budget more properly balanced between what some may want in a world of unconstrained financial resources and what we truly can afford.

It also is time for the administration to reverse its self-defeating course of stubbornly clinging to procurement of several, unnecessary strategic nuclear weapons programs—the MX missile system and the B-1B bomber—while insufficiently funding our conventional forces.

Eliminating a pay raise to keep our skilled, experienced enlisted personnel in the services while underfunding the military's depot maintenance programs, the Navy's flying hours program and the Army's training ammunition allotment demonstrates the wrong defense priorities of this administration.

These wasteful, "big ticket" procurement programs, which will produce only marginal military results and not do even that before late in the decade, also represent a second threat to our overall military readiness in the very near future. They will result in a significantly increasing proportion of the annual defense budget being "uncontrollable" in each appropriation year.

In fiscal year 1981, this percentage of the defense budget was only 28 percent of total outlays. Under this administration, this percentage is expected to grow to about 41 percent in fiscal year 1987—a growth of about 46 percent. This shift in outlay patterns means that any expected future cuts are going to be even more directed against the readiness and sustainability programs which make up most of the declining "controllable" part of the annual military budget.

Congress is almost as much to blame as is the administration for this, because we approved those big ticket items I referred to, and others such as the two nuclear aircraft carriers, without meaningful changes. Unless we are willing to rescind out previous approval or to stretch our some of these programs, only the readiness accounts will be available to absorb the expected cuts.

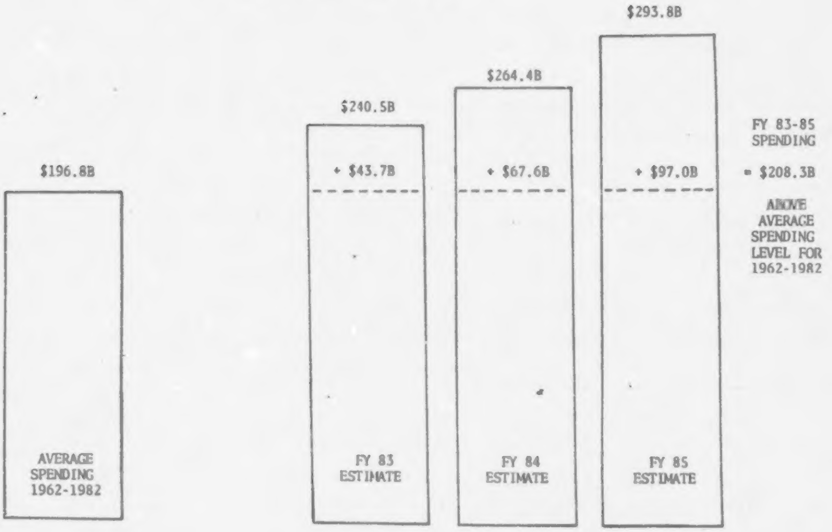
If we are to prevent these false economies in readiness, the administration must stop abdicating its responsibilities by "stonewalling" the Congress about where further reductions can be made in the fiscal year 1984 DOD budget.

The administration as well as the American people are victims of the administration rhetoric used to justify its defense budgets—the erroneous statements that we are inferior to the Soviets "in virtually every measure of military power" and that "in constant dollars the defense budget is just about the same as it's been all the way back to 1962" (see chart).

The American people are looking for more leadership and posturing on defense from both the executive branch and the Congress. It is time they are given it.

REAGAN MILITARY SPENDING (TOA)

COMPARED TO 1962-1982 AVERAGE



SOURCE: DEPARTMENT OF DEFENSE PUBLISHED FIGURES

ALL FIGURES IN CONSTANT 1983 DOLLARS

Secretary **Weinberger**. All right, but would I have an opportunity to comment on your questions?

Senator **Levin**. I am sure you will on your own time.

Secretary **Weinberger**. All right, sir. I don't have much time on my own. It is only in response to your questions. [Laughter.]

### NATO SPENDING MORE THAN WARSAW PACT

Senator **Levin**. General Vessey, last year you indicated to us that NATO, including the United States, was spending more for total defense than was the Warsaw Pact, including the Soviet Union. Was that accurate and is it still accurate?

General **Vessey**. I hope I gave you an accurate figure and to the best of my knowledge I did, Senator. I can't tell you whether it is still accurate or not. I suspect that it is probably very close.

Senator **Levin**. You are not able to tell us whether or not NATO outspends the Warsaw Pact?

General **Vessey**. No.

Senator **Levin**. Mr. Secretary, can you tell us whether in total defense expenditures NATO outspends the Warsaw Pact?

Secretary **Weinberger**. I think in effective defense expenditures the answer is clearly "No," Senator, because the Soviets spend very little on personnel costs. Whatever NATO spends and whatever we spend is a very large amount on personnel costs. So on effective military strength, the answer is clearly "No," that NATO does not outspend the Warsaw Pact.

Senator LEVIN. Including personnel costs in total defense expenditures, do you know, Mr. Secretary, whether or not NATO outspends the Warsaw Pact?

Secretary WEINBERGER. I don't have it before me, but I think again what we have to look at is effective military strength, and I know that NATO does not outspend the Warsaw Pact in acquiring effective military strength from year to year.

Senator LEVIN. Are you saying that the money we spend on personnel and training of that personnel is not significant?

Secretary WEINBERGER. No; I am not saying that at all. I am saying you have got to measure against the acquisitions that the Soviets make with the sums they do not spend on personnel, the ammunition reserves they acquire, the new weaponry they acquire, the sophisticated R&D that they do and the addition to their strategic forces which has been enormous, as we have seen on the charts that have been presented here. The total input is not the important thing. It is what they get out of it.

Senator LEVIN. You are saying, then, that in some measures of defense expenditures, excluding personnel costs, that the Warsaw Pact has outspent the NATO countries: Is that what you are saying?

Secretary WEINBERGER. On acquiring effective military strength; yes.

Senator LEVIN. Your statement on page 3 then should be qualified. On page 3 you say that: "We found that the Warsaw Pact has outspent the NATO countries," and I would suggest that when you make a statement like that that you add the qualifiers that you are eliminating personnel costs, which by the way General Vessey, I think this morning in his statement has indicated is a pretty critical cost. I believe that how much we spend on personnel and whether we give a pay raise is pretty important.

Secretary WEINBERGER. It is very important and that is why we spend between 44 and 50 percent of our budget on personnel. We aren't begrudging it, and we aren't saying it isn't important. It is very important.

Senator LEVIN. But yet you exclude it when you compare Warsaw Pact and NATO defense spending.

Secretary WEINBERGER. Please let me finish, Senator. When you contrast it with a society which doesn't regard these things as important and which does spend huge amounts on their military hardware, on their design and on their increasing destructive power, then it is proper to take into consideration the two different kinds of spending.

Senator LEVIN. All I am suggesting, Mr. Secretary, is when you make a statement that the Warsaw Pact has outspent the NATO countries for defense that is inaccurate unless you qualify it by saying if you have eliminated a major portion of military expenditures the personnel costs. Now if you had said that, it would not have been an exaggeration. But I am afraid it is rather typical of the exaggeration that we are getting from this administration.

Let me give you another example. The President at a press conference just a few weeks ago said that in constant dollars the defense budget is just about the same as it has been all the way back to 1962.

Mr. Secretary, do you know the average spending on defense in constant dollars between the years 1962 and 1983?

Secretary **Weinberger**. Well, in the interest of accuracy, Senator, I will get it for you. I wouldn't want to guess at it this morning, but I think that we have had a chart this morning which demonstrates the difference in the amount of spending for defense that we have contributed in the United States since 1955. It used to be a little over 50 percent of the total budget and it has gone all the way down. There has of course been inflation during all of those periods, but nevertheless there has been a decline in American defense spending and there has been an increase in nondefense spending of a very spectacular nature.

Senator **Levin**. I would like to put in the record a chart, Mr. Chairman, showing that in 1983 we in outlays spent $206.6 billion compared to the average spending of the 20 previous years of $187 billion; in other words, we spent $19 billion more in constant dollars in 1983 than the average in each of the previous 20 years. This directly contradicts the President's statement that we have spent about the same in 1983, and of course you can add the 1984 amounts to that.

[The chart referred to follows:]

### DEFENSE SPENDING

Between fiscal year 1962 and fiscal year 1984, DOD outlays in fiscal year 1984 constant dollars and excluding the costs of Southeast Asia (SEA) are estimated to be approximately $4,082 billion. This averages $177.5 billion per year over the 23 year period. If the SEA costs are included, the total becomes $4,200 billion for a 23-year average annual outlay of $182.6 billion.

### LEVIN EXHIBIT "A"

[Constant fiscal year 1983 dollars in billions]

| Fiscal year | Outlays | TOA |
|---|---|---|
| 1983 | $206.6 | $238.7 |
| 1982 | 195.3 | 227.8 |
| 1981 | 181.4 | 202.2 |
| 1980 | 174.3 | 182.4 |
| 1979 | 168.0 | 178.0 |
| 1978 | 161.7 | 179.2 |
| 1977 | 160.9 | 179.7 |
| 1976 | 158.0 | 171.6 |
| 1975 | 163.8 | 165.6 |
| 1974 | 164.0 | 169.8 |
| 1973 | 167.5 | 177.7 |
| 1972 | 184.6 | 187.5 |
| 1971 | 197.2 | 193.4 |
| 1970 | 217.6 | 214.3 |
| 1969 | 236.4 | 236.0 |
| 1968 | 243.3 | 238.9 |
| 1967 | 223.5 | 238.6 |
| 1966 | 189.6 | 224.0 |
| 1965 | 170.5 | 184.1 |
| 1964 | 186.6 | 189.8 |
| 1963 | 187.3 | 196.9 |
| 1962 | 184.7 | 196.5 |
| Average spending 1962–83 | 187.4 | 198.8 |
| Percent increase over average | 10.2 | 20.1 |

Senator **Levin**. Mr. Chairman, I also will be asking to put in the record a number of charts which give a more balance view of where we are militarily vis-a-vis the Soviet Union, because the charts that we saw this morning are just in some measures. The impression being promoted here this morning is that we are behind in everything. Every single chart DOD presented this morning shows we are behind, and yet, we know that we are ahead in some military categories.

You know we are ahead in some military categories, but the impression which you cast here this morning, and you do this on national television and national radio, is that we are behind in everything. I don't think that adds any credibility to what we are trying to do here which is to make some very critical decisions on where we are stronger, where we are weaker, and where we should be putting more of our scarce defense dollars.

Mr. Chairman, I am going to ask to put in the record a number of charts which show areas where we are behind and where we are ahead and not just charts, as the Secretary has shown this morning where we are behind.

[The charts follow:]

WHO'S AHEAD IN MILITARY PRODUCTION RATES, 1974–1982?

| | United States | U.S.S.R. | U.S./NATO | U.S.S.R./Warsaw Pact |
|---|---|---|---|---|
| Major surface combatants | (1) | (1) | X | |
| Tactical combat aircraft | | X | | (2) |
| Aerial refueling tankers | X | | X | |
| Large amphibious assault ships | X | | X | |
| AWACS aircraft | X | | X | |
| Long-range, air-launched cruise missiles | X | | X | |
| Attack submarines (SSN/SSGN/SS) | | X | (1) | (1) |

[1] About equal.

[2] About equal or slightly ahead.

Source: Defense Department information.

EXHIBIT A.—MEASURE OF MILITARY POWER

| | U.S. postiion | Soviet position | U.S. advantage |
|---|---|---|---|
| Strategic nulcear forces: | | | |
| Total warheads and bombs | 9,662 | 7,060 | +2,602 |
| Total missile warheads | 7,128 | 6,735 | +393 |
| Total MIRV'D missiles (IC/SL) | 1,056 | 980 | +76 |
| Total MIRV'D' SLBM's | 496 | 208 | +288 |
| Total SLBM warheads | 4,976 | 1,433 | +3,543 |
| Total heavy bombers, including LRA Backfires | 316 | 235 | +81 |
| Conventional forces: | | | |
| Marine divisions | 4 | 1 | +3 |
| Marine manpower | 155,000 | 13,000 | +142,000 |
| Strategic airlift aircraft | 310 | 200 | +110 |
| Tactical airlift aircraft (Active and Reserve) | 511 | 400 | +111 |
| Tanker aircraft (Active/Reserve) | 621 | 50 | +571 |
| Utility/cargo helicopters | 4,970 | 2,100 | +2,870 |
| Airborne warning/control aircraft (AWACS) | 24 | 9 | +15 |
| Carrier-based fighter/attack aircraft | 720 | 60 | +660 |
| Antisubmarine warfare aircraft afloat | 278 | 150 | +128 |

EXHIBIT A.—MEASURE OF MILITARY POWER—Continued

| | U.S. postiion | Soviet position | U.S. advantage |
|---|---|---|---|
| Aircraft carriers: | | | |
| Attack carriers | 12 | 0 | +12 |
| VTOL/helicopter carriers | 12 | 4 | +8 |
| Amphibious ships (less helo carriers) | 49 | 26 | +23 |
| Destroyers | 83 | 69 | +14 |

| | U.S./NATO position | Soviet/Warsaw Pact position | U.S./NATO advantage |
|---|---|---|---|
| Aircraft carriers: | | | |
| Attack | 8 | 0 | +8 |
| HELO/ASW | 10 | 3 | +7 |
| Destroyers and cruisers | 143 | 74 | +69 |
| Frigates and corvettes | 204 | 126 | +78 |
| Mine warfare ships | 303 | 216 | +87 |
| Intermediate range bombers and ground attack aircraft | 5,100 | 3,500 | 1,600 |

Sources: Library of Congress based on Defense Department/ Defense Intelligence Agency data.

U.S. SENATE,
COMMITTEE ON ARMED SERVICES,
*Washington, D.C., January 24, 1983.*

Col. JOHN M. COLLINS, USA (Ret.),
*Senior Specialist in National Defense, Congressional Research Service, Library of Congress, Washington, D.C.*

DEAR COLONEL COLLINS: In a recent speech and press conference, President Reagan told the American people the following:

"Today, in virtually every measure of military power, the Soviet Union enjoys a decided advantage." (November 22, 1982.)

". . . in constant dollars the defense budget is just about the same as it's been all the way back to 1962." (January 5, 1983.)

Are these statements accurate?

Thank you in advance for answering this question.

Sincerely,

CARL LEVIN.

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CONGRESSIONAL RESEARCH SERVICE,
THE LIBRARY OF CONGRESS,
*Washington, D.C., January 25, 1983.*

Hon. CARL LEVIN,
*U.S. Senate, Washington, D.C.*

DEAR SENATOR LEVIN: Correspondence from you this date, supplemented by a telephone conversation with Peter Lennon, posed two questions, and asked for one- or two-line responses:

Q-1. Did the Soviet Union enjoy a decided advantage over the United States in virtually every measure of military power on November 22, 1982?

A-1. Soviet military power was superior in some respects on that date. Parity or U.S. superiority prevailed in others. Neither nation is likely to attain total military preeminence in the near future.

Q-2. Has the U.S. defense budget been just about the same in constant dollars since 1962?

A-2. The U.S. defense budget in constant dollars showed few sharp fluctuations (except for the Vietnam War) between 1962 and 1980. Sharp increases since that time already are being contested.

Sincerely,

JOHN M. COLLINS,
*Senior Specialist in National Defense.*

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CONGRESSIONAL RESEARCH SERVICE,
THE LIBRARY OF CONGRESS,
*Washington, D.C., February 1, 1983.*

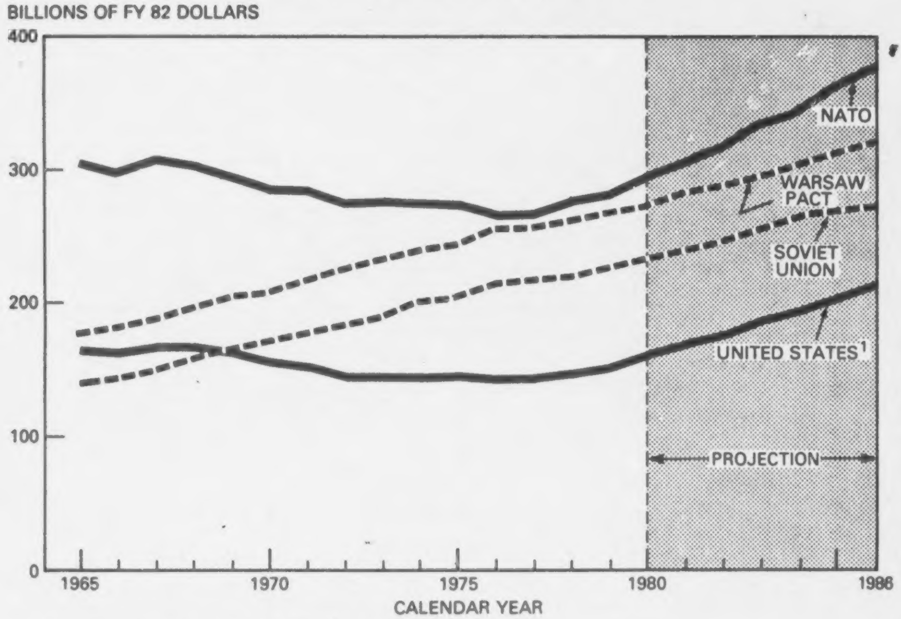
To: Hon. Carl Levin, 140 Russell Building U.S. Senate.
From: John Collins, Senior Specialist in International Affairs (National Defense).
*Subject: United States-Soviet Military Balance.*

My analysis of the current United States-Soviet military balance—built upon my study, "U.S.-Soviet Military Balance: Concepts and Capabilities, 1960-1980"—demonstrates that it is not the case that the Soviet Union is militarily superior to the United States in virtually every respect.

JOHN M. COLLINS.

CHART C-12

COMPARISON OF NATO AND WARSAW PACT TOTAL DEFENSE COSTS



C-12

¹SOUTHEAST ASIA INCREMENT EXCLUDED (I.E., VIETNAM COSTS)

(From DOD Annual Report FY 1982)

STRENGTHS AND NUMBERS—UNITED STATES VERSUS U.S.S.R.

Secretary WEINBERGER. Mr. Chairman, in view of that statement I would simply like to say again that we stand completely on the accuracy of the strength, the numbers and the relationships shown on the charts presented to you this morning. They paint a bleak picture which a lot of us would like to ignore and a lot of us feel that they make too compelling an argumemt. The simple fact of the matter is that, unfortunately, those charts we presented are totally and completely accurate, and we stand behind them.

Senator LEVIN. Are we ahead of them in anything? If I could ask just one more question. Are we ahead in anything?

Secretary WEINBERGER. We have a small advantage in surface combative ships, which is very fortunate because of the required missions that we may someday have to execute, Senator.

Senator LEVIN. My time is up, and I thank the chairman.

Chairman TOWER. We will have another round this afternoon, Senator.

I would like to utilize some of my unexpired time just to make a brief comment.

Since O&M finally seems to enjoy popular congressional support, as it very well should, and if we don't touch the O&M account, this would leave only procurement and R&D to achieve the $7 billion additional outlay reduction that has been suggested.

Now if we eliminated entirely the following accounts for the Army, aircraft, missiles, weapons and track combat vehicles, ammunition, tactical, and support vehicles; in Navy procurement, aircraft, including the F-14, F-18, A6E, AV8B, and EA6B, their weapons, we eliminated shipbuilding and conversion, ship support equipment; from the Marine Corps, aircraft and munitions; and from the Air Force, aircraft and munitions, including the B-1, F-16, F-15, and C-5, that would still bring us short in terms of outlay savings by about $100 million of the $7 billion that has been suggested.

I happen to be one of those who believes that readiness is not solely the function of O&M accounts, but procurement has something to do with readiness. If you don't replace worn out and obsolete equipment, all the O&M money is not going to sustain the level of readiness that you should have and you are going to be throwing a lot of O&M money away in increased maintenance costs for outdated and outmoded and worn out equipment.

Senator THURMOND?

Senator THURMOND. Thank you, Mr. Chairman.

Mr. Chairman, I would like to associate myself with the remarks of my distinguished colleagues and add my own welcome to Secretary Weinberger and General Vessey. We are pleased to have you here and I commend you both for the fine job you are doing.

Secretary WEINBERGER. Thank you, sir.

## AMERICA HAS PAID THE PRICE

Senator THURMOND. It is important to put the debate over defense spending into historical perspective. Traditionally Americans have loathed large defense budget in peacetime, and historically we have paid the price in lives and blood for this sort of naive thinking. Pearl Harbor, Bataan, Anzio, and Normandy are but a few of the reminders that civilian politicians who fail to do their sworn duty cause other Americans to forfeit their lives on fields of battle.

The Pentagon is often blamed for large defense expenditures, which is unfortunate. The truth is that the need for increased defense spending is a result of Congress failing to appropriate the necessary funds to maintain force modernization over a prolonged period.

The result has been that the United States needs to modernize nearly all programs at one time. The problem was caused by the Congress and it must be resolved by the Congress. Drastic cuts in the defense budget will not resolve the problem. Force modernization must continue. Drawing the process out over a longer period of time will endanger our Nation and cost far larger sums of taxpayer dollars in the end.

From 1964 until the present the United States has had five Presidents. Conversely, from 1964 until just a few months ago the Soviet Union had one leader. The Presidents of this country have had to justify defense spending first in support of the Vietnam war and then in a decade when public sentiment opposed such expenditures.

The Soviets do not have to justify their defense spending to the Russian people. The sad part is that while we spend time arguing about specific programs, the Soviets are building a main battle tank every 3 hours and a jet fighter every 7 hours. Additionally, the Soviets maintain across-the-board modernization for all of their programs.

### SOVIETS MAINTAIN UNRESTRAINED GROWTH

It should be obvious that while we have shown great restraint, the Soviets have maintained unrestrained growth. Critics will lead us to believe that we are perpetuating the arms race. The unanswered Soviet growth in the last decade alone should dispel that myth. The truth is that you cannot compete in a race that you refuse to enter.

Mr. Secretary, I have a few questions here that I would like to propound.

Secretary WEINBERGER. All right, sir.

Senator THURMOND. I notice that there is a substantial increase in the request for research, development, test, and evaluation funds for strategic programs over last year's request. Would you take just a short moment and elaborate on the programs where these funds will be spent?

### STRATEGIC MODERNIZATION R&D

Secretary WEINBERGER. These, Senator, are for the continued research and development for the strategic modernization of the three parts of the Triad, that is for the MX missile, the development of the B-1 bomber, and the Advanced Technology Bomber which will succeed it, our submarines and the development of the D-5 missile. These are the primary strategic goals.

We also have a substantial amount in the budget for improving command, control, and communications and its survivability. Those are areas where we have a particular need for improvement. There are also sums in it for strategic defense and the research and development associated with them.

Senator THURMOND. Mr. Secretary, there has been concern over the survivability or hardness of our command, control, communication, and intelligence systems in the event of a ballistic missile attack. I notice a substantial increase in research and development funding for intelligence and communications.

Would you explain how these funds will be spent to insure our ability to have effective communications and intelligence following a nuclear attack?

Secretary **WEINBERGER**. Yes, sir. To the extent that I can in open session, they would be spent on the means of hardening and insuring the survivability of existing communication networks, of building in additional redundancy into those networks, the utilizations of systems that would not be put out of commission by a nuclear blast and insuring that we do have an ability to communicate worldwide, but particularly with our own strategic nuclear systems.

At the moment we have a degree of vulnerability which is far more than we should have because of the lack of hardness of our communications. The President in October 1980, when he announced his strategic recovery program, made this his very top priority. These are the areas in which we are working. We are also working in areas to improve the communications, both the speed and the certainty of communications to the submarines.

Senator **THURMOND**. Mr. Secretary, the request for research and development funds for support of other nations reflects a small increase over the request of fiscal year 1983. Would you explain for the record what support of other nations refers to?

Secretary **WEINBERGER**. Yes; I would like to respond completely for the record. We will get it all to you, sir.

Senator **THURMOND**. That would be all right to do that.

[The information follows:]

### OTHER NATIONS SUPPORT

As indicated in our Annual Report to the Congress for Fiscal Year 1984 (p. 330, table 2, TOA by Major Force Program), there has been a slight decrease from the fiscal year 1983 request for support of Other Nations: fiscal year 1983—$795 million to fiscal year 1984—$685 million. Only a small amount (fiscal year 1983—$4.8 million, fiscal year 1984—$4.7 million) of the total amounts for the Support of Other Nations, however, is for research, development, test and evaluation funds—for Army, Navy, Air Force ($2.7 million) and other Defense Agencies ($2.0 million). All of the funds are used for the U.S. share of Support of Other Nations, such as: U.S. share of NATO national support to the von Karman Institute for Fluid Dynamics; SHAPE Technical Center/Advisory Group for Aerospace Research and Development; and International Cooperative RDT&E (Exploitation of Foreign Items and International Research and Development). The remaining $680.3 million of the $685 million for Support of Other Nations requested for fiscal year 1984 is also needed for specific U.S. commitments and interests: NATO Infrastructure—$300.0 million; United States Services' O&M—$125.4 million; Military Personnel Pay—$142.8 million; and Procurement—$112.1 million.

### MILITARY PAY INCREASE

Senator **THURMOND**. General Vessey, Senator Tower, Senator Jepsen, and myself have introduced a bill that would give most members of the military a 4-percent pay increase. Do you feel, General Vessey, that it is sufficient compared to the target pay increase originally in the 1984 budget?

General **VESSEY**. Senator, keeping the pay comparable depends on what happens to inflation and what happens to the economy as a whole. I just can't tell you whether it would be or not.

Senator **Thurmond**. Mr. Secretary, what funds were requested for intratheater airlift?

Secretary **Weinberger**. I am sorry, Senator?

Senator **Thurmond**. What funds were requested for intratheater airlift?

Secretary **Weinberger**. I can get you the exact amount. We have tried to increase the airlift both intratheater and intertheater. We can get the precise amount, but there is an increase for both types of airlift and for sealift.

[The information follows:]

### INTRATHEATER AIRLIFT FUNDING

The fiscal year 1984 budget request includes $852.0 million for Intratheater Airlift. This is composed of $.5 million for R&D, $233.7 million for procurement, $285.8 million for Military Personnel costs, and $332.1 million for O. & M.

### UNCONVENTIONAL WARFARE FORCES

Senator **Thurmond**. Mr. Secretary, during the past year you stated that the administration intended to increase funding for unconventional warfare forces to enable the United States to explore potential Soviet weaknesses. Would you elaborate on these plans.

Secretary **Weinberger**. I would be glad to elaborate on it in closed session, Senator.

Senator **Thurmond**. That is all right.

Secretary **Weinberger**. Generally we are trying to increase our capability in all the ways that we think is necessary to improve our conventional strength, and that is one of them.

### GUARD AND RESERVE

Senator **Thurmond**. I believe you testified before I got here from another committee that you do have initiatives in the budget for the Guard and Reserve.

Secretary **Weinberger**. Yes, sir.

Senator **Thurmond**. Would you state just the amount?

Secretary **Weinberger**. Yes. We have added about $500 million for equipment and some 28,000 additional strength for Guard and Reserve that we plan in, in fiscal year 1984. I mentioned also when you were at your other hearing the increase in applications for college ROTC positions and the additional scholarships.

We will also plan to transfer some ships and some aircraft to the Reserve, and generally, as I mentioned earlier, the Reserve and Guard units are performing extremely well. In fact, we have Guard and Reserve units that have a very high degree of combat readiness.

Senator **Thurmond**. The Guard and Reserve are probably the most economic facet of the Defense Department, aren't they?

Secretary **Weinberger**. Yes, sir, and a very vital part of it because they would be the groups that would supplement the basically inadequate permanent force structure that we have should we ever have the kind of emergency we all hope to deter.

## CIVIL DEFENSE

Senator **Thurmond**. As a last question, Mr. Secretary, and I think my time is about up, I would like to ask you about civil defense. What recommendation did you make on that and would you care to make any remarks on it?

Secretary **Weinberger**. There is a recommendation in the budget for increased funds for civil defense for the maintenance and continuity of Government and for attempts to improve the survivability of civilian population plans for dispersal and things of that kind. I realize that a lot of people think that this is somehow wrong and that you shouldn't think about these contingencies or that if you do it means you plan to fight this kind of war. Again, it is a vital part of deterrence. It is a vital part of the strength as it is perceived by the Soviets, and we have to bear in mind that they are allocating very large amounts to this. We do have amounts in the budget for this purpose. Some were approved last year, but we are seeking more this year.

Senator **Thurmond**. Thank you, Mr. Secretary.

Chairman **Tower**. It is my intention to call on Senator Exon and then Senator Cohen and then to break for lunch. We will return at 2:15 at which time Senator Kennedy will have the floor.

Senator Exon?

Senator **Exon**. Thank you, Mr. Chairman.

## MILITARY PAY

In his state of the Union address the President apologized to our men and women for imposing a pay freeze upon them and then said, and I quote: "Our Armed Forces are finally properly paid after years of neglect."

At this time I would like to ask Mr. Chairman, unanimous consent to have entered in the record a letter from Dr. Alice Rivlin, the Director of the Congressional Budget Office, which was in response to my request to CBO for a comparison of the private sector and military pay since 1972.

Chairman **Tower**. Without objection, it will be included.

[The letter follows:]

U.S. Congress,
Congressional Budget Office,
*Washington, D.C., January 28, 1983.*

Hon. J. James Exon,
*Subcommittee on Manpower and Personnel, Committee on Armed Services, U.S. Senate, Washington, D.C.*

Dear Senator Exon: In response to your request of January 25, 1983, for information regarding relative increases in private-sector, federal civilian, and military pay scales, my office has prepared the attached charts. These charts are derived from a Department of Defense Joint Services Report, "Military Pay Adjustment Study," dated April 15, 1982.

The first chart shows changes in the three pay scales since 1972, based on the assumption that the 1972 levels were consistent with comparability. The second chart shows the extent to which federal civilian and military pay scales have failed to keep pace with private-sector pay as measured by the Professional, Administrative, Technical, and Clerical (PATC) survey. Both charts project the effects of alternative zero and 4-percent pay raises in fiscal year 1984.

The charts show that by fiscal year 1980 the gap between military and private-sector pay increases had reached 6.9 percentage points. The special military pay raises of 1981 and 1982 restored military pay to effective comparability with the

DOD study's estimate of the PATC survey, but the pay cap of 4 percent in 1983 caused a shortfall. Another pay cap of 4 percent in fiscal year 1984 would increase the shortfall to 7.9 percent. The pay freeze proposed by the Administration for 1984 would create a gap of 11.4 percentage points, larger than has existed at any time since 1972.

The Defense Department study's estimate of private-sector pay increases based on the PATC survey, however, differ from the annual pay comparability adjustments proposed by the President's Pay Agent. Administrative changes in the methodology used by the Office of Personnel Management to calculate the comparability adjustment for the Pay Agent have had the effect of reducing the comparability increases that otherwise would have been due for federal civilian and military employees. The comparability gap between military pay and the PATC-based adjustments proposed by the Pay Agent would be only 3.9 percent with a pay freeze in fiscal year 1984, compared to 11.4 percent using the methodology of the Defense Department study.

There is no simple way to resolve this difference, which is created by periodic changes in the coverage of the PATC survey and application of the data by OPM in ways meant to improve the accuracy of comparability calculations for the federal civilian work force. It is worth noting, however, that comparing military pay to the index of average hourly earnings of private nonfarm production workers would result in a gap similar in size to the one in the Defense Department study.

Please note that the military pay scales used in the comparison refer only to basic pay and allowances for subsistence and quarters. Not included in the comparison are military bonuses and the variable housing allowance, which supplement other elements of military compensation. Also excluded are the effects of reallocation between military basic pay and allowances, which reduced military basic pay in fiscal year 1977 and 1978.

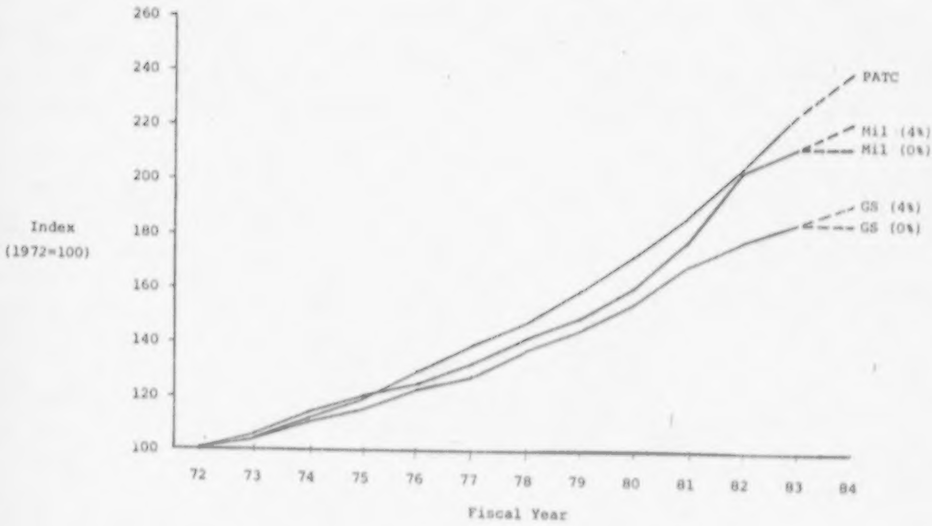
With best wishes.

Sincerely,

ALICE M. RIVLIN, *Director*.

Enclosures.

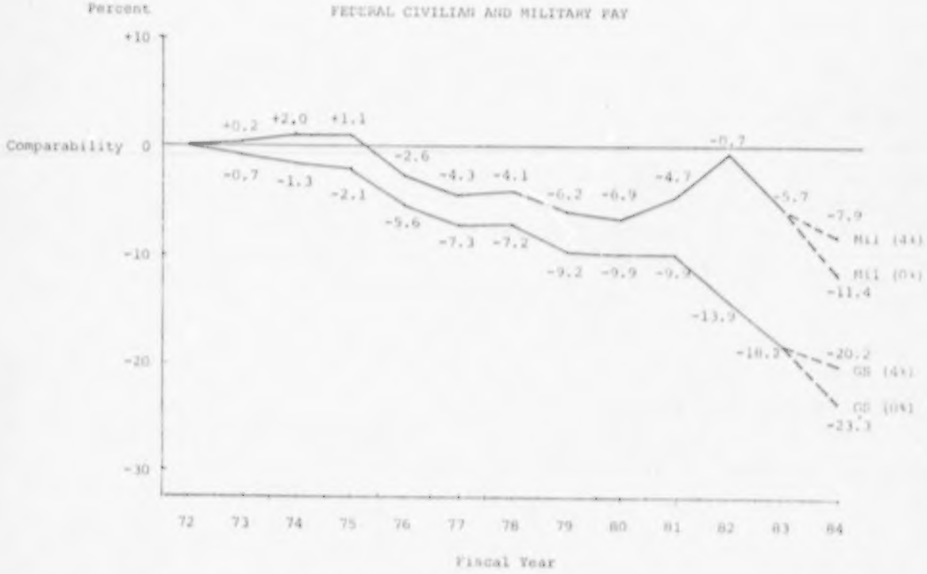
FEDERAL CIVILIAN, MILITARY, AND PRIVATE-SECTOR PAY



Source: Department of Defense

COMPARABILITY SHORTFALLS IN

FEDERAL CIVILIAN AND MILITARY PAY



Source: Department of Defense

Senator **Exon**. CBO points out that by fiscal year 1980 the gap between military and private sector pay increase had reached 6.9 percentage points, the largest gap since 1972. The military pay raises in fiscal years 1981 and 1982 restored military pay to effective comparability. The pay cap of 4 percent in 1983 created another gap. The pay freeze proposed by the administration for fiscal year 1984 would widen the gap to 11.4 percentage points, a larger gap than any that has existed since 1972.

In other words, measured against the professional, administrative, technical and clerical index that the Defense Department has been using, a pay freeze in fiscal year 1984 will cause military pay to slip even further behind the comparability level than we had when we began using it prior to what it was in 1981 when the Secretary called it "disgracefully low."

Now, General Vessey, I would like to ask specifically if you and the other members of the Joint Chiefs of Staff were contacted and asked in advance as to what your personal recommendations were with regard to the pay freeze that the administration has recommended and, if you were, can you tell us what your response was?

General **Vessey**. Let me say, Senator, that we weren't asked specifically about the pay freeze, but we did have the opportunity to tell the President himself what our views were on military pay and the importance of maintaining military compensation.

Senator **Exon**. Can you tell us what those views were that you expressed to the President?

General **Vessey**. Each one of the Joint Chiefs of Staff told the President that we had finally begun to feel the impact on readiness from the improvements in the personnel situation and we stressed the importance of not slipping back into a pay situation that would let that readiness drop again. The President understood that and considered those recommendations.

Senator **Exon**. So then is it fair to say that the President took this action despite your objections?

General **Vessey**. Well, I think as the Secretary said, the President took the action because he considers himself President of the whole United States in addition to being Commander in Chief of the Armed Forces and he was implementing a freeze on all Federal pay.

Senator **Exon**. Well, I can understand that, except that this administration has made a feature of its overall improvement of the armed services, especially readiness.

Mr. Secretary, would you care to respond to the questions that I am trying to get at in this area?

### PAY FREEZE REGRETS

Secretary **Weinberger**. Senator, I think that it is perfectly fair to say that no one in the United States regrets the request of a pay freeze for the military more than the President and he made that about as clear as he possibly could in his state of the Union message. I would perhaps put myself second as the person who regrets it most, and I am sure the general is in the same category.

Nobody wants this kind of thing. There has been obviously a great deal of talk about deficits. There is a great deal of desire to reduce the deficit by reducing the need for outlays as quickly as possible. If you are having a Government-wide program that applies as the President's does to Government employees, civilian, and active duty military, military retirees, civilian retirees, social security beneficiaries, and a whole list of other beneficiaries of governmental pay and benefits, it has to be universal.

That is why the President did make that recommendation, but he did it in the case of the military with particular and specific regret that it was necessary to ask the sacrifice of men and women who, as you have said correctly, spent a long time not having comparable or adequate pay. I very much hope we will have the opportunity to make it up in 1985. That is my firm and clear intention and we have, as I say, blocked out in the first gross approaches to the 1985 budget an amount necessary to do that.

Senator EXON. Mr. Secretary, harkening back to your words in 1981 where you declared this disparity then disgracefully low, would you say that the same term could be fairly and properly used with regard to the recommendations of the President and yourself regardless of the necessity for that action?

Secretary WEINBERGER. This year? No, I would not, sir, because we have had very good success in the campaign against inflation. The pay increase on a strict basis of inflation for 1984, had it been recommended, would have been about 3.8 or 3.9 percent. That would not mean that we would have fallen back to those shamefully or disgracefully low levels to which I think I correctly referred as having prevailed during much of the decade of the seventies.

Senator EXON. Well, Mr. Secretary, we can have a difference of opinion on this, but I believe that the facts show that it is not a matter of inflation, as Dr. Rivlin adequately points out in her letter to me. We are talking about a disparity in pay. During the time when you said it was disgracefully low, it is not as unfair, there is not the difference as there will be under your plan. It is difficult for me to understand how you can say it was disgracefully low previously, but it is not now when obviously it is worse.

Secretary WEINBERGER. Well, because there have been major increases put in the budget, thanks to Congress and to the recommendations of the President, and they have totaled close to 30 percent. But you also have to bear in mind, Senator, that part of the points that Mrs. Rivlin is referring to occurred in fiscal 1983 when we asked for 8 percent and it was cut back. We did not get the full amount requested in 1983. We did, however, maintain very close to actual parity.

I also have, I will have to say to you frankly, substantial difficulty in some of these comparability studies. We do not, fortunately, have any occupational speciality in civilian life that is called rifleman. So you do have some difficulty in measuring true comparability. You also have, and I am going to take the other side of this point for just a moment, the peculiar difficulties and hardships that people in uniform services have to undergo. That is why we want very much to make this up just as quickly as we can because we believe that economic conditions will clearly permit it next year and, as I say, I have already blocked out an amount in the 1985 budget to do it.

Senator EXON. I would simply point out for the record and to you, if you have not seen it, Mr. Secretary, the military posture paper that has been presented to us. On page 57 under "Manning the Force" wherein the Joint Chiefs say "Lack of predictability and equitable pay levels is a strong disincentive to long-term commitment to military service."

I am very much concerned and don't understand why if we can find a $30 billion increase in the overall defense budget we have to freeze the pay of those involved therein. It seems to me that you could be challenged on those grounds, that you are taking out of the hide and pay of our military people the procurement of new weapons.

Secretary WEINBERGER. No, Senator, I don't disagree at all with the statement in the posture message to which you just referred, and I certainly don't disagree at all as to the vital necessity of keeping the pay as close to comparability, and as high, as possible and even higher in many cases, recognizing the special additional burdens of the military.

This is precisely why the President expressed his particular regret that a universal program, which he is proposing, did indeed have to be universal to the extent of including even the military who have not had what I consider to be fair and proper treatment in past years and which we believe we have just tried to regain, certainly with the help of the Congress, and to which we want to return just as quickly as we can.

Senator EXON. Thank you.

I am advised that my time is up, Mr. Chairman.

Chairman TOWER. Senator Cohen?

Senator COHEN. Thank you, Mr. Chairman.

### EQUALITY WITHIN THE FEDERAL PAY SYSTEM

Mr. Secretary, are you suggesting that the universal system that we have means that all people should be treated equally within the Federal pay system?

Secretary WEINBERGER. Equality is a situation that occurs only when you have a situation such as now when you are asking equal sacrifice of everybody; that is to say, people forego a planned and hoped for and contemplated increase based on whatever the increased cost-of-living results in, and it will be about 3.8 or 3.9 percent.

Senator COHEN. Well, there are some questions that if you are going to apply this to people or to manpower why shouldn't we apply it to other areas as well? We have very deep cuts, for example, in energy conservation, fuel assistance and food stamps. The theme seems to be, we are all in this together and that is why the military has to share in the reduction or the cap on pay.

In testimony we had from Secretary Lehman last year when he indicated that if he had to have a choice he would choose pay over ships. General Vessey, you were given a choice by Senator Warner between end strength and pay. Assuming you were given the choice between pay cuts and weapons systems, how would you choose? My understanding is that most of the members of the Joint

Chiefs would take the increased pay instead of the weapons systems themselves. Is that not true?

### INCREASED PAY OVER WEAPONS

General **VESSEY**. I think that is correct in a general sense. We certainly want to maintain readiness, but at the same time we recognize that you can't just hire people and not equip them. You have got to have the equipment, too.

Senator **COHEN**. I understand that. You will recall just 3 years ago that Admiral Haywood was testifying before this committee that we had a virtual hemorrhage in the Navy by virtue of the inadequate pay system that we had and that we have taken measures to correct that. Last year we reduced the pay increase from 8 percent to 4 percent, and there was an indication made last year that you would seek a comparability pay increase.

I don't think anyone intended when you said comparable that everybody was going to be frozen at the same level. Now we have a next year coming and we have a proposal, according to reports that I see, that would cost something in the neighborhood of $4.9 billion for the pay raise that would be scheduled for the following year.

But in any event, it seems to me that we get into the difficulty once we say we are going to treat all employees or beneficiaries equally in sharing the burden and we ought to look at areas as well.

Secretary **WEINBERGER**. Do I misunderstand you? Do you not favor trying to make this up next year?

Senator **COHEN**. Trying to make what?

Secretary **WEINBERGER**. Trying to make up this pay increase? You cite the amount that may be required in a way that led me to believe that perhaps you opposed trying to make it up next year.

Senator **COHEN**. No, I think we may have a movement here to put the money back in for the pay and the personnel and look for other areas to reduce it. So I would go forward this year as well as next year to make sure that we do have the readiness that General Vessey was talking about, the human element being perhaps more important than systems themselves.

### CIVIL DEFENSE

Mr. Secretary, could I just inquire about the civil defense budget again. If the Soviets were not building their civil defense system, would you recommend that we go forward in any event?

Secretary **WEINBERGER**. I think there are certain aspects to it that don't have a relationship to that. Those are the aspects of the desirability of doing everything you can to plan for and try to secure the continuity of Government and to improve the lot of the people who may be subjected to such an attack in every way that you can. I think that the philosophy or the approach which says that you mustn't even think about this is roughly akin to the approach of some people who say they don't want to participate in making hospital space available in the event of some kind of war because they think to do so may bring closer the advent of war. I think that is basically a quite cruel and totally unrealistic approach.

I think that what we have asked for are realistic sums. We are doing it because it is an element of deterrence and because it is essential to acquire some of these additional capabilities that the money requested would bring.

Senator COHEN. Mr. Secretary, are you familiar with the writings of Mr. Franklin Spinney, Chuck Spinney?

Secretary WEINBERGER. Oh, yes.

## COST OVERRUNS

Senator COHEN. I am advised that there was a briefing given to the Pentagon concerning the management initiatives that have not brought cost overruns under control. That report has been classified, and I was wondering if you would be willing to submit that to the members of the committee so that they might have an opportunity to review it?

Secretary WEINBERGER. Well, Mr. Spinney to whom you refer is one of the analysts in a large office in the Department and basically his thesis is to project into the future a number of trends which he has found in examining the cost of various weapons systems. The projection into the future is made without taking into consideration any of the new facts that are involved with respect to the new management initatives that we have put into effect. It does not consider the effect that they have had on reduction of total cost. The raw projection of future costs based upon a series of past events when those events don't include the new facts cannot be very helpful.

Senator COHEN. Well, as I understand, the CBO filed a May report saying that the gains that have been made have been undercut by program managers of the Trident submarine, the SSN-688, the Tomahawk, the AV-8-B, and 11 other defense systems. So it seems that Mr. Spinney is not alone in looking at the nature of what is occurring in terms of the continued cost growth.

Norm Augustine who used to serve in the Department itself, has written a book called Augustine's Laws in which he projects that if we continue to spend the kind of money and have the kind of overruns that we are experiencing, it will cost $1 trillion by the year 2054 to buy one tactical aircraft.

Secretary WEINBERGER. That exactly reflects the danger of just using a naked projection without any intervening control factors that have already been applied and are being applied.

Senator COHEN. Let me look at the control factors, let's say, of the Tomahawk cruise missile. I notice in the report, for example, that you say the IOC is on time. Isn't it a fact that it may be on time, but it is substantially over cost, and there will be a substantial reduction in numbers.

Secretary WEINBERGER. We don't know whether there will be a substantial reduction in numbers or not. There are various factors which have gone into some of the original projections made many years ago which have turned out to be not as accurate as we would have liked, and that is another of our changes that we put into the system. It is trying to get a realistic initial estimate of the cost. There are a number of problems that have developed with it, and there are a number of changes that have been recommended for it.

Early in the hearing this morning I talked about one of the things that we are doing, which is in effect freezing the design once we are satisfied with it rather than constantly making changes. But in any new weapon system, and the cruise missile is certainly a very new weapon systems, there are bound to be things that develop on the course of the deployment and development that do require changes, and we are trying to hold those to a minimum.

We will certainly try to do that and have done it to a considerable extent already. But with the Tomahawk and with the cruise missile there have been a number of problems. It is critically important that we keep the program on time and we are doing that, and we can look at our unit requirements again as the missile's initial operating capability is reached.

Senator COHEN. Well, I agree with you about keeping it on time, but the fact of the matter is that there is going to be a substantial cost growth in this program notwithstanding the management initiatives there have been.

Secretary WEINBERGER. There has been cost growth based upon many factors which occurred long before we got here, and changing a lot of these and turning a lot of those around does take time. I spoke about the tank, and the M-1 tank was 20 years in the development. That of course is a prescription for cost overruns, just in delay by itself. So forcing the time, freezing the design and keeping a very close management hold in a biweekly basis to see what, if anything, is starting to push costs or delays has worked. It will continue to work but I cannot promise you that all of the things that we inherited can be cured overnight.

### MISMANAGEMENT BY CORPORATE AND PENTAGON

Senator COHEN. Well, the only point I was trying to make, Mr. Secretary, is that even with the management initiatives there have been, I would add one thing, mismanagement to the program as well, and I would say on the corporate side as much as on the Pentagon side.

Secretary WEINBERGER. Well, in that particular program we changed managers. We found that it had occurred in the past, and rather than stay with what we had, we did make changes, this will be done any time we find it in the future. A large part of this budget does simply involve the inflationary aspects of long spending programs. So we try to reduce the time as much as we can, and obviously we try Government-wide to reduce inflation as much as we can.

### PENALTIES FOR DEFENSE CONTRACTORS OF MISMANAGEMENT PROGRAMS

Senator COHEN. What sort of penalties do you impose upon defense contractors who engage in rather gross mismanagement of programs?

Secretary WEINBERGER. In the contracts that we now have we have a number of provisions that attempt to facilitate that. We disallow a lot of costs, for one thing and it has caused quite a lot of noise in the industry. I have disallowed all costs for lobbying. We are disallowing all costs for any one of a number of marginal activities that don't contribute to the development of the weapon systems. We also have fixed price contracts, and we have penalties for overruns that are borne in various proportions by the different contractors.

Again, you have to bear in mind that a lot of these contracts were drawn up in the 1970's and in 1980, and that is again part of this ongoing problem. That is why you just can't look at 1 year like fiscal year 1984 and say well, it appears that some other programs have been cut and we have got to make defense fair with everybody else rather than looking at the threat or what we have to do. Nevertheless, I don't disagree for a moment that what we should do is do everything we can as economically and as efficiently as possible. But when you have 6-, 7-, 8-year programs that you take over in the middle, it takes some time to make a better showing and with some contracts you can't make any changes. They are fixed contracts.

Senator **Cohen**. Well, I would only suggest, Mr. Secretary, since my time is up, that I think, as we are calling for sacrifice across the board, that we start to focus more on defense contractors who have a habit, if not an inclination, to engage or somehow produce cost growths which are dramatic, notwithstanding the amount of savings that have been achieved by the Reagan administration. Those can be wiped out virtually in one quarter of one fiscal year by the kind of cost growth that continues to be pervasive in our defense contracting system.

Secretary **Weinberger**. I think you will find, Senator, that the contractors are the first to tell you that things are different.

Senator **Cohen**. I hope so.

Thank you.

Chairman **Tower**. The committee will stand in recess until 2:15. We will start promptly at 2:15 and I urge the members to be on time.

[Whereupon, at 12:41 p.m., the committee recessed, to reconvene at 2:15 p.m., the same day.]

## AFTERNOON SESSION

Chairman **Tower**. The committee will come to order.

It has been requested by some members that the record be held open until 6 p.m. this evening to file any additional questions to be responded to in writing by the Secretary and the Chairman of the Joint Chiefs of Staff, and that will be done. The record will be held open until 6 p.m. for questions to be submitted in writing.

Our first questioner this afternoon is Senator Kennedy.

Senator **Kennedy**. Thank you very much, Mr. Chairman.

First of all, I want to thank you for your welcome to this committee. I have had the honor of representing Massachusetts now for some 20 years, and I think any of us who have served in the U.S. Senate, as well as the American people, realize that there is a very important debt of gratitude to the members of this committee for what they have done to insure that we have the kind of security we have for this Nation and our allies around the world.

I also want to observe, having listened to may colleagues this morning, that there was a great deal of discussion about the state of our economy and recommendations for defense cuts and the percentage of increased spending that is necessary.

Mr. Secretary, I do want to welcome you here. It is always a pleasure to meet with you. We have met on different forums in the past——

Secretary WEINBERGER. We have indeed, Senator.

Senator KENNEDY [continuing]. And we have always had useful exchanges.

The real common theme remains that the members of this committee and I think the people of this country are prepared to expend what is necessary to secure our interests and the foreign policy objectives of the United States.

As one who is as concerned as any about the state of our economy and as one who is as concerned as any about the cuts in domestic programs, I think it ought to be very clear that it is my understanding, and I think this has been stated by the members of the committee themselves, that we want to spend what is essential for the security of the United States. We do not want to spend any more, but we do want to spend what is necessary to carry out our national security and foreign policy objectives.

### NATIONAL SECURITY OBJECTIVES

With that as the premise of my question, I would like to direct your attention to points No. 1 and 2 on your testimony, where you talk about our national security objectives. At this point in your testimony you state:

> It may be useful for us to recall that our overall national security objectives in a very abbreviated form are: (1) To deter military attack against the United States, its allies, and other friendly countries; (2), in the event of a conventional attack, to deny the enemy his objectives and bring a rapid end to the conflict on terms favorable to our interests.

Can we do that today?

Secretary WEINBERGER. Senator, obviously it depends on the nature of the attack. It depends on——

Senator KENNEDY. Well, just yes or no. Can we protect the interests of the United States and its allies?

Secretary WEINBERGER. I do not think we can do it to the extent that we should be able to do it.

Senator KENNEDY. Are you suggesting that we are a helpless giant——

Secretary WEINBERGER. No, sir.

Senator KENNEDY [continuing]. And cannot protect the interests of the United States of America?

Secretary WEINBERGER. No, I am not.

Senator KENNEDY. I think it is very important for the American people to understand whether the Secretary of Defense believes that we can protect the security interests of the people of the United States of America and our allies today. Yes or no, Mr. Secretary?

Secretary WEINBERGER. Senator, it is not a yes or no proposition. I think we have very great strength. But if you take a worst scenario, if you take a full-scale nuclear surprise attack on the United States by the Soviet Union, I do not believe that we would have a sufficient degree of retaliatory power left. So I would feel that we have to have the strategic strengthening that unfortunately will take a number of years of steady application of resources to acquire.

If we had a conventional attack by some other power at a place that we could reach quickly, then I think we could make a very good account of ourselves and take care of most of the problems, but you do not know——

Senator **Kennedy**. You have established——

Secretary **Weinberger** [continuing]. Which kind of attack it is, where it will come from or with what strength. We do not at this point have, in my opinion, sufficient retaliatory or deterrent strength. We need to acquire more and we need to acquire it quickly.

Senator **Kennedy**. Well, this is your testimony. Point one is, to deter military attack against the United States, its allies, and other friendly countries. Can we do that today?

Secretary **Weinberger**. I think we need to first of all——

Senator **Kennedy**. Can we do that today? Not what do we need in the future. I want to find out, it is important for the American people to find out, and it is important that we know as we start to debate what we are going to need in the future. Yes or no.

Secretary **Weinberger**. You do have to have an examination of what sort of attack it is and from what direction it comes.

Senator **Kennedy**. Well, are there circumstances in which the United States of America and the American people are vulnerable to a Soviet attack and could be defeated? Are you saying that?

Secretary **Weinberger**. I am saying that we are vulnerable to a situation in which it would be perceived by our adversaries that we would not have a sufficient degree of retaliatory strength to deter the attack if they should be willing to make that kind of a venture. There are differing kinds of attacks and differing kinds of locations for attacks.

We have very great strengths, of course, as we should have. We do not have in my opinion enough to deter military attack against the United States, its allies, or other friendly countries, if that should come in a particular form, at a particular time, using particular weapons. That is the kind of additional strength that we seek. That is what we sought 2 years ago, last year, this year, and that we will be seeking in the coming 5 years.

Senator **Kennedy**. Well, could you describe those circumstances? As I believe this is the first time—and I may be wrong, and the General should correct me if I'm wrong—that we have had a Secretary of Defense that has appeared before a congressional committee that has indicated that we are vulnerable——

Secretary **Weinberger**. Senator, you have a secretary——

Senator **Kennedy** [continuing]. And that we are not able to protect the vital interests of the United States, its allies and other friendly countries. These are your criteria.

Secretary **Weinberger**. Senator, you should take the answer as it comes and listen to the specifics.

Senator **Kennedy**. Your answer reflects one perception of our military situation.

Secretary **Weinberger**. No, I think my answer is best made by me.

Senator **Kennedy**. The American people would just like to know: Can the United States defend itself today?

Secretary **Weinberger**. Yes, the United States can defend itself——

Senator **Kennedy**. And its allies?

Secretary **Weinberger**. You have now changed your question. You have asked, can we deter an attack on us. We can defend ourselves. How well, only time will tell.

A lot would depend on how much time we had, how much warning we had. When you put the question that way, as "the only Secretary of Defense" and so on, "who makes speeches of this kind," you have to bear in mind that I took office and hold office after a period of a decade of neglect and two decades of growth by the Soviet Union. And it has left us in a position which requires a great deal of additional strength which we can only acquire on a regular basis year after year after year. That is what we are doing now and that is what we seek to continue this year.

Senator **Kennedy**. Well, I do not question the need for additional strength. I do question the comment that the United States is unable to protect its interests and the interests of our allies around the world.

Secretary **Weinberger**. Senator, each time you ask that you rephrase it and put it differently.

Senator **Kennedy**. I think each time that either you say it, or others say it——

Secretary **Weinberger**. No, your question is: Can you deter an attack against the United States, its allies, and other friendly countries right now? Obviously, the answer is that nobody knows. But we should have the degree of strength that we need to give ourselves the confidence that we can do that. And that is what we are trying to acquire——

Senator **Kennedy**. All right. Would you tell us what——

Secretary **Weinberger** [continuing]. Because we think we need additional strength to give us that confidence.

Senator **Kennedy**. Do you have that confidence now?

Secretary **Weinberger**. I have the confidence that we can acquire that strength, that we have——

Senator **Kennedy**. That we have it today? Do you have confidence today?

Secretary **Weinberger**. I do not know that we have sufficient strength to do it today, and that is why——

Senator **Kennedy**. You do not know whether you have confidence that we can do it today?

Secretary **Weinberger**. No, no. I do not know whether we have that degree of strength today, because I do not know——

Senator **Kennedy**. Well, if you do not know it, how in the world are the Members of Congress and the American people going to know it?

Secretary **Weinberger**. That is exactly why we are asking you for additional strength. We do not know that we have enough, and when you do not know if you have enough, you do not know what the Soviets perceive that they have——

Senator **Kennedy**. How will you know when we do have enough? If you do not know whether we have enough today, how are we going——

Secretary **Weinberger**. Senator, you are——

Senator **Kennedy** [continuing]. To know if we have enough next year or the year after, if you're not prepared to say now——

Secretary **Weinberger**. You did comment at the beginning that you and I have had useful exchanges in the past——

Senator **Kennedy**. I know, but we are under a 10-minute rule. I used to be a chairman and we used to have longer periods of time. [Laughter.]

Secretary **Weinberger**. You and I used to talk about these matters when they involved health and welfare.

Senator **Kennedy**. I do not want to be discourteous, but I do want to cover some ground.

Secretary **Weinberger**. You had exactly the same habit or propensity at that time of not wanting the answer to begin with.

Senator **Kennedy**. Well, it has always been done with a good deal of respect. [Laughter.]

Secretary **Weinberger**. But it is essential to let the answer be finished if we are to have the record straight.

What we are saying now is that in order to have deterrent strength you have to have a degree of strength so that both we and the Soviets will perceive it as sufficient retaliatory capability. So that, should they put in a first strike, they would know that the retaliatory strength was such that it would incur such costs to them that they would be unwilling or unable to bear it, and so would be deterred. That is the kind of equation we have to deal with.

I am frank to tell you that I do not know that I, or anyone, can tell you the precise moment that we will have that degree of strength. I do not think that we have sufficient deterrent strength now and that is why we feel it is essential that we follow the program and the request that we have before you and had before you 2 years ago.

Senator **Kennedy**. Well, what kind of an attack do you think that we cannot withstand? Are you just limiting it to a strategic first strike?

Secretary **Weinberger**. There is the strategic first strike, which is——

Senator **Kennedy**. We cannot deter that against the United States and its allies?

Secretary **Weinberger**. That involves the worst scenario, involves surprise and lack of sufficent warning. There is a massive attack across the central front of NATO.

Senator **Kennedy**. We cannot deter that?

Secretary **Weinberger**. Given the difference in numbers, we would have a major effort to do that.

Senator **Kennedy**. Could we or could we not deter it?

Secretary **Weinberger**. Let me just outline some of the problems, because none of these questions can be answered very specifically. Your deterrence involves a perception of your own strength by the other side. I am not able to read their minds either at this point. I want a margin of safety, and I want a degree of deterrent strength that can give us very complete confidence. I do not think we have that and I think we have to reacquire it, and I think we must do it quickly.

Senator **Kennedy**. I must say that for any of the Soviets who are listening to the Secretary of Defense talk about the problems that he has, and the questions that he might have, it would certainly appear to invite the interpretation that the United States is more of a paper tiger, rather than having the kind of military capability which I am absolutely convinced that we do have, and that has to be strengthened.

Secretary **Weinberger**. Well, Senator, you could be——

Senator **Kennedy**. I think that if we can make a judgement that we can protect the interests of the United States and our allies today, If we can agree on that, it would make it a great deal easier to judge what is going to be necessary in the future.

That is really the point that I was driving at.

Secretary **Weinberger**. I think it is quite important——

Senator **Kennedy**. But if we cannot agree on that, I just wonder how we are going to build agreement on what we need in the future.

Secretary **Weinberger**. It is quite important that that judgement be correct. There is very little margin for error. I have even less margin perhaps than you for error because I have the direct responsibility, and it seems to me that this is not an area in which we can afford to take any chances or afford to be very wrong.

You do have an imbalance that has developed on the strategic side, and an imbalance that has been there for some time on the conventional side. You can be quite certain that the Soviets know what they have and they know what we have, and you can be quite certain they are listening, and they are not picking up anything new as a result of these answers because they know the relative degrees of strength. They know we have enormous strength, and so far, for 37 years, this has worked.

But we have now permitted a dangerous imbalance to open up, and it is that which I think it is vital to correct and to close as quickly as we can.

Chairman **Tower**. Senator, I am afraid your time is up.

Senator Jepsen?

Senator **Jepsen**. Thank you, Mr. Chairman.

## HOW MUCH DEFENSE IS ENOUGH

Mr. Secretary, the question being asked all over the country today is, how much defense is enough. There may not be any simple answer, but ofttimes simple answers are the best if one reflects. On the issues. It seems to me that the level of defense we must maintain in this country is exactly what you have been saying—the level that will keep the peace without war and bloodshed and enable us to go to the negotiating table with our adversaries and negotiate effectively for the reduction or the elimination of nuclear arms.

In fact, for the last 18 months we have been at the table doing just that, in one instance the elimination, in the other instances for reductions.

It is strange that some critics who are advocating a freeze would lead the American public to believe that nothing was going on. But in reality, they are a couple of years behind times.

Secretary **WEINBERGER**. Several.

Senator **JEPSEN**. And settling for a freeze while in fact we are working toward a reduction in one instance and elimination in the another. Well, of course critics can kill a play, but very few critics ever write one, Mr. Secretary.

I would like to touch on just a couple of areas of concern that we on the Subcommittee on Manpower and Personnel have. It does seem that there is room for improvement and savings of money.

As many have voiced on this committee this morning and earlier this afternoon, we want to help attain that level of defense we need. We want to help in any way we can by making suggestions as to how we might be able to do the same job and keep that same level. How we might get more bang for the buck, if I may use that expression. I have never heard you say you are not interested in that.

Secretary **WEINBERGER**. We are very interested in getting everything we possibly can for as little money as we can possibly safely spend.

### HEALTH CARE

Senator **JEPSEN**. Well, from little acorns big oak trees grow. We are talking now in the area of health care during the subcommittee deliberations on the President's budget request for fiscal year 1983, Mr. Secretary. The chairman expressed concern over the widely publicized inability of the Department of Defense to provide wartime medical support for the Armed Forces, coupled with the even more widely publicized problems of assuring the quality of care in military hospitals.

This concern is heightened by the impossibility of defining the elements of an aggregate estimated to exceed $7 billion in health-related items in the budget request. We have been spending over $7 billion, Mr. Secretary, on health care. Yet we have reports in my committee that in the event of a mobilization emergency 9 out of 10 of our men and women in uniform would not receive adequate medical care. Yet we find five major military hospitals in the Washington area alone.

The subcommittee, as you know, concluded that the present organization of the Department of Defense makes it impossible to have an effective management of health resources. We have four overlapping separate health care delivery systems, the Army Medical Department, the Navy Medical Department, the Air Force Medical Service, and the Civilian Health and Medical Program of the Uniformed Services.

The question is, just for this isolated area: Do you believe there is room for an improved delivery of health care and a state of readiness and possibility of saving considerable funds if we could combine all of these and coordinate them better than we have in the past?

Secretary **WEINBERGER**. Senator, I think there is always room for improvement in all areas of activity, a total combination or consolidation is not possible because they have very different missions and will be in different parts of the world at different times.

But I think we can do better, we have started some procedures, along that path. We have acquired the contingent use of 50,000 hospital beds throughout the country in the event of an emergency that would require them. We have been able to sign up a large number of physicians to serve. And of course, should we get into an emergency of that kind we would undoubtedly have to do what we do with the rest of the Nation, and that would be to draft additional medical capability.

There is no question that we would be able to make some savings if we are able to make better consolidations in the service medical units. I do not see savings in this area because there is a very large population to take care of now, and an even larger population that we would have to be concerned about should we have to go to war.

This is one of the areas where we are examining the situation very carefully to see if further savings from consolidations can be developed. We have uniform procedures. We have a number of savings that we have started in the CHAMPUS program for dependents. I would be very hopeful that at this time next year we will be able to tell you about some very substantial progress we have made in this area.

Senator **JEPSEN**. I am not advocating that we cut back on either the quality or the delivery of health care. I want to make that very clear. But since each area and branch of the service does have its own department, its own R&D, its own hospitals, it does seem that there would be a need to set the stage that would carry over to other areas in our Defense establishment.

But most importantly we need to correct that situation if it in fact is true. Statements were made repeatedly that 9 out of 10 of our men and women in uniform in the event of a firefight or a mobilization would not receive adequate medical care.

Secretary **WEINBERGER**. No, sir, that is not correct, because that takes existing, immediately available resources, and not just those against the various predicted number of medical treatments that would be required. The resources available are not static numbers. They would be expanded immediately and built upon in accordance with plans that are developed for that required expansion.

But we do need more than we have now even on a peacetime basis, our requests are before you for that. The ability to expand quickly has to be there as part of the normal mobilization capability of the country, and it is there.

Senator **JEPSEN**. I hope we might again look into a hospital ship, ideally the best in the world, flying the American flag, not only for reasons of mobilization but also for reasons of foreign policy. This is something that our adversaries are doing now with two hospital ships up and down the coasts of various third world regions.

## SAVINGS ON F-100 ENGINES

Mr. Secretary, finally, it has come to my attention that a recent proposal has been made to the Air Force that could offer over $1 billion savings in a multiyear purchase of the F-100 engines. I am not certain if you are personally aware of this.

Secretary WEINBERGER. Yes, sir, I did. And we are analyzing that very carefully. It is a potential savings, of some $3 billion I am told in the letter, obviously anything of that kind holds a great deal of attraction for me. I received it yesterday, and we are analyzing it very carefully.

Senator JEPSEN. Would you provide an assessment of it for the record?

Secretary WEINBERGER. Surely.

Senator JEPSEN. If that sets a pattern for other contractual relationships, I think the committee would be well advised to look into that.

Secretary WEINBERGER. I do not know that there is too much pattern for other areas, but in any event we certainly will do that. As I said, I received it yesterday afternoon, as a matter of fact, and we are looking at it very carefully, because if it is anything like the savings that are claimed we would of course be interested.

[The information follows:]

### PRATT & WHITNEY MULTIYEAR PROPOSAL

The Department has been preparing for a planned fighter engine competition for future F-15/F-16 engines for over 1 year. In the summer of 1981 both Pratt & Whitney Aircraft (PWA) and General Electric Company (GE) responded to an Air Force request for information. Both contractors subsequently exchanged ideas and information with the Air Force regarding the planned competition. Responses have recently been received to a draft request for proposal (RFP) and the Air Force is in the process of making final revisions to the formal RFP which is scheduled for release in March 1983. In December 1982, PWA submitted an advanced proposal to respond to our engine requirements. The Department has completed an assessment of this multi-year proposal. The proposal does not qualify as an unsolicited proposal for which a negotiated noncompetitive procurement is permissible under the Defense Acquisition Regulations. It has been rejected. PWA's early submission of a multi-year proposal does not diminish the fact that the proposal addresses stated Air Force requirements. PWA's submission is a clear indication that, faced with competition, contractors are encouraged to offer a better deal. The Government and the taxpayers are best served by maximum use of competitive procurement. Providing the opportunity for two manufacturers of large high thrust fighter engines to develop and qualify derivative engines with improved characteristics in a competitive environment is consistent with Congressional and Department sponsored improved acquisition initiatives. Our objective in this competitive fighter engine effort is to achieve substantial reductions in acquisition, support, and life cycle costs. The Department is convinced that competition will result in attractive cost saving proposals from both PWA and GE.

### WASTE, FRAUD, AND ABUSE

Senator JEPSEN. One of the themes that I refer to whenever I discuss defense, and I think it is probably true of the other 99 Senators is waste, fraud and abuse, with regard to all Government programs. An article on January 17 in the Wall Street Journal, 1983, indicates that the problem may becoming worse than ever.

I know that you have outlined several steps to curb this problem, but are you familiar with the article by Brooks Jackson entitled "Leaky Defense: Pentagon's Big Empire Is Rife With Rip-offs and Policing Is Spotty"?

Secretary WEINBERGER. Yes, generally, sir, I am.

Senator JEPSEN. Is that an accurate article?

Secretary WEINBERGER. No sir, not completely. We have a large number of initiatives underway to catch anything of that kind. A lot of those articles and a lot of the statements that appear in those forums are based on fairly old information or fairly old practices.

As we mentioned this morning, it takes some time to reverse these, but I think that the capability that we have now with the Inspector General and the review and oversight group, and even with the hotlines that we have put in for calls in recommending areas to look at for savings, these have all been extremely profitable. As I mentioned this morning, we have saved about $3.3 billion in this area alone just looking at matters of that kind.

Obviously, we hope to do more and there is always room for improvement. I think there are a number of problems with that specific item.

Senator **Jepsen**. Thank you, Mr. Chairman. I have some remarks that I would like to have made part of the record regarding the pay raise legislation introduced by you and I yesterday.

Chairman **Tower**. They will be incorporated in the record.

[Remarks by Senator Jepsen follow:]

### REMARKS BY SENATOR JEPSEN ON THE MILITARY PAY ADJUSTMENT ACT OF 1983

Mr. Secretary, before I begin my questions, I would like to briefly discuss the pay raise legislation Chairman Tower and I introduced yesterday.

A few weeks ago, I was very concerned when the rumors began to circulate that no pay raise would be granted to our service men and women during fiscal 1984. After working so hard to reverse the adverse recruiting and retention trends of the late 1970's, I feared that a pay freeze now would send entirely the wrong signal to our military people and endanger the progress we had made. Because of the state of the economy, the current success would probably be sustained if military pay was frozen, but I feel that in the long term, we would once again have serious manpower readiness problems.

The approach chosen by Chairman Tower and I attempts to balance the need for a compensation increase to hold the gap between civilian and military wages on the one hand, and the requirement to work within constrained funding on the other. That is why we opted to provide a delayed 4 percent targeted increase. The projected cost will be roughly half a billion dollars in fiscal year 1984.

I want to make it clear that this legislation is the starting point for compensation hearings which will be held by the Manpower and Personnel Subcommittee later this year. The proposal is by no means chiseled in granite and I hope that you and I can work together to provide for the long term health of our career military in an economical and cost effective manner.

Chairman **Tower**. Senator Bingaman?

### PROJECTED MILITARY SPENDING

Senator **Bingaman**. Mr. Secretary, I wanted to ask you about one of the charts you used. It was a chart showing the projected increase, the increase that you projected in March 1981 in military spending, I believe.

Secretary **Weinberger**. Yes, sir. That is the last one.

Senator **Bingaman**. Then it showed essentially the cuts that has been made. Yes, that is the right chart.

Secretary **Weinberger**. There is $116 billion, Senator. The final bar was the total amount and then the various reductions that have been made in specific fiscal years, including the reduction for this year. This shows that about $50 billion of that $116 billion is now still left in.

Senator **Bingaman**. Those are cuts that have been made both at the initiative of the administration and the Congress in getting in various budget through the last 2 years.

Secretary WEINBERGER. Exactly.

Senator BINGAMAN. How much of that total cut is the result of canceled programs that the administration set out to pursue at the time you became the Secretary?

Secretary WEINBERGER. There are a variety of programs in there. There are many that have been cut out and others started. The first and largest one that was cut out was the original MX proposal that we inherited, which was about $40 billion; but now there has been another program that we have requested, the MX deployment substituted for that.

But there have been several individual programs cut. The E4B planes are an example. The procurement of those was reduced by over one-half a billion dollars. Various modifications to the B–52's were proposed at one time, $200 million. Modifications and changes to the Minuteman 2 system, $335 million. Various modifications of ship systems in some of the ships that are under plan and under construction, $448 million. The oceanic satellite systems, $580 million. There are a whole series of programs of this kind.

There were other plans for the expansion of some of the force structures that we have postponed until the second 5-year period, and of course in the final year there, in the 1984 year, there are savings totaling some $11.3 billion in budget authority made up of the reduced inflation estimates and the pay freeze, but we can identify them all.

Senator BINGAMAN. Do you have a total figure for the amount of that which results from cancellation of programs?

Secretary WEINBERGER. Yes.

Senator BINGAMAN. What is that total figure of the $116 billion?

Secretary WEINBERGER. I will have to get it for you specifically. In the outyears, part of the reduction there is changed inflation estimates. The amount that is actually attributed to the program reduction I can certainly get for you.

Chairman TOWER. Would you please supply that for the record, Mr. Secretary?

[The information referred to follows:]

### FISCAL YEAR 1984 DOD AUTHORIZATION POSTURE

Of the total amount of $116 billion that President Reagan added to the Carter 5-year defense program, we have subsequently deleted $66 billion. Of that amount, we have cut about $35 billion for reduced inflation and we have cut about $31 billion in programs.

### PROCUREMENT FUNDING

Senator BINGAMAN. I wanted to ask about procurement funding for a minute. I saw a copy of the press release you issued yesterday that had a chart attached, TOA by title. It is a description of the 1984 budget. In procurement it shows $12.2 billion, a change in procurement which I think is the largest of the items changing between 1983 and 1984. Is that an accurate figure?

Secretary WEINBERGER. Yes, that is accurate, and that is in total obligation authority.

Senator BINGAMAN. I was wondering, I also saw a document that was issued yesterday called The President's Fiscal Year 1984 Budget Freeze and Reform Plan. There is a chart at the back of that which says: Composition of 1984 DOD Budget. It lists strategic program procurement at $6.9 billion and other procurement at $75.9 billion a $6.9 billion increase in both of those.

My confusion was that those two figures add up to a $13.8 billion increase in procurement this year, whereas the other figure that was quoted was $12.2 billion.

Secretary **Weinberger**. The total obligational authority includes some programs done by other departments, such as the Department of Energy, for certain of our weapons. There are different classifications, different ways of categorizing this, both by OMB and by ourselves.

The second document you held up is the OMB document relating to the budget as a whole and the charts here relate to our own departmental activities, and the difference may be there; but we will be glad to explore that with you and your staff and see if we can make sure there is not any substantive difference.

Senator **Bingaman**. What is the precentage increase in procurement as you folks define that between 1983 and 1984?

Secretary **Weinberger**. In obligational authority?

Senator **Bingaman**. Yes.

Secretary **Weinberger**. For procurement. I will have to get it specifically for you. I would think it is probably over last year's procurement about $15.8 something like that.

Senator **Bingaman**. $15.8, did you say?

[The information follows:]

### PROCUREMENT FUNDING INCREASE

The total obligational authority which we are requesting in fiscal year 1984 for procurement is 17.2 percent higher than fiscal year 1983.

Secretary **Weinberger**. Something in that range.

The problem here, Senator, is the obligational authority is required for your longer range programs. Under the way we have tried to do things with multiyear procurement, we have a higher initial authorization so that we can get the advantages of multiyear procurements and long leadtimes in the purchase of equipment. Then the outlays from that sometimes pay out over 5, 6 years.

The obligational authority went up last year quite sharply, for one reason because we had the two carriers authorized. By having two authorized for 1 year, we can have the savings in outyears. In this year we are trying to take savings of that kind in the outyears.

### MILITARY PAY

Senator **Bingaman**. Let me ask you about military pay. As I understand it, the administration doesn't really want to have a freeze on military pay but is doing it in order to keep intact its principle of universality or its across-the-board freezing.

Secretary **Weinberger**. That exactly describes the situation.

Senator **Bingaman**. But your plan is and your statement says you plan to make that up to the military personnel next year.

Secretary **Weinberger**. That is my hope.

Senator **BINGAMAN**. Are you planning to apply that universally across the board to other programs next year for the salaries you are freezing this year?

Secretary **WEINBERGER**. That is neither my department nor my responsibility, Senator, but my own feeling is that the military requirements, duties, and responsibilities are sufficiently greater to warrant this specific kind of makeup as quickly as we can get it, and that is why I have stated to the troops and publicly that this is what I want to do.

Senator **BINGAMAN**. You do not know whether the President would plan to do a similar thing for civil service pay?

Secretary **WEINBERGER**. No; and we don't have plans at this time to do that on the civilian side of our department.

### LEASING SHIPS AND AIRCRAFT

Senator **BINGAMAN**. A last question, Mr. Secretary, about the articles coming out in the last few days involving the plans of the Navy to lease ships and the Air Force to lease various aircrafts rather than buying them. I want to know the extent to which this is being done and why you think it is preferable to buying those items.

Secretary **WEINBERGER**. The reason it is being done is twofold. One is we can effect a cost savings on specific systems to which it is applied, which are the TAK-X ships that we have asked to have it applied to. The other reason is that it enables us to move more quickly in the actual acquisition and in the receipt and the deployment of these particular things that we think are necessary.

It is done after full consultation with all of the committees in the case of the Navy acquisition that we have applied it to, with all of the specific approvals of both the committees and the General Accounting Office, and the savings on the ship are actually a little less than $50 million on the one. The purchase prices of the TAX-X ship would be $182 million, and the discounted cost to the Navy of the lease payments would be $137 million.

Then if you make the analysis completely accurate, we have included the forgone taxes or the tax loss to the Treasury. Even including that, the cost would be $153. So counting that, you have about a $19 million or $20 million savings by doing it this way.

Senator **BINGAMAN**. That is all I had, Mr. Chairman.

Chairman **TOWER**. Senator Quayle?

Senator **QUAYLE**. Thank you, Mr. Chairman.

### ECONOMIC THREAT

Mr. Secretary, I believe in a response to Senator Warner this morning, when he was talking about the deficit and the problems at home, that defense spending would in fact be cut, that you said that we should not be engaging in a self-fulfilling prophecy that defense spending is going to be reduced. I do not believe that it is a self-fulfilling prophecy. I really believe we are just talking about facing reality.

The real situation is, as Senator Warner and Senator Nunn pointed out and others, that these reductions are going to take place over and above the $8 billion because of the economic threat that we find ourself facing here at home. We know about the Soviet threat but we are also concerned about the economic threat.

You do not have to be too much of a student around here if you are looking to reduce the deficit, which everybody says is important to long-term recovery, that you look at a total budget increase of $43.3 billion. And since the Defense budget is proposed to go up $30.5 billion, that is where the Congress is going to focus.

Now I wonder, General Vessey, if I might have your attention for 1 minute. I know that you and the Secretary do not want to go beyond the $8 billion, but assume the Congress is going to go beyond the $8 billion. Which would be preferable procedure? Would it be preferable for the Congress to go ahead on a sort of an ad hoc basis to make the cuts? Or should the Pentagon assist us in coming up on a priority basis of where the cuts should be?

Would it not be better for you to have input on where these reductions are going to take place rather than having the Congress go at it at will?

General VESSEY. I think it would be better if the reductions were not made in the first place, Senator.

Senator QUAYLE. I realize that; but if the reductions are going to be made, would it not be better for the Pentagon to come forth and to help and to assist the Congress to see where on a priority basis these reductions should be made? Or do you really think it is better for the Congress at its own discretion to go ahead and make cuts at will?

Is that a preferable process? Or do you think there should be a partnership in this situation we now find ourselves in?

General VESSEY. If you look at how to provide the best defense for a given set of dollars, I think the services and the Department of Defense can probably come up with the best answer. Certainly, whether or not to cut the defense budget is a political question, and is one that Congress has to address.

Senator QUAYLE. I certainly hope that that kind of feeling will continue because I really believe we are going to get ourselves into a dangerous situation if you are just going to say, OK, Congress, go ahead and cut and we are going to sit there and not have any negotiations at all.

The fact of the matter is, as the President talked about the other night, we are talking about facing reality, bipartisanship. I realize you cannot come forward today and say this is where we will compromise, but I hope there are messages sent, Mr. Secretary, not only to our chairman but to the chairman of the Budget Committee, which I understand you will be before Thursday, that there will be some negotations coming up with what can be realistically accepted as far as defense spending is concerned.

Secretary WEINBERGER. While we are sending messages, I would also hope that the message that cutting the defense budget will add to unemployment and will decrease revenues can also be conveyed by all of us who are interested in the same things, and at the same time that by doing those two undesirable things we will also be weakening defense. Those are the reasons that I think General Vessey and I are reluctant, certainly on day 1, to concede that a carefully constructed budget which has already been reduced substantially and reduced in prior years substantially should be cut further.

Senator QUAYLE. I certainly would not expect nor do I ask you to come forward with that today, but I certainly hope that the feelings that are exuded here today between you and the members of the Senate Armed Services Committee and the followup discussions, whether it is with the Budget Committee or others, will be along the lines of bipartisanship, will be along the lines of coming to a meeting of the minds, and that the worst thing that could happen would be for us to dig in our heels and say we are not going to compromise. Because what will happen is the defense budget is going to get rolled. You have other projects up here like the MX missile, and we as a nation cannot afford defeat. We cannot afford more failures. This administration cannot afford more failure, and I wholeheartedly support the administration.

We have to take the theme that was announced by the President in the state of the Union, and come to grips with a very important problem facing our country. That is, the deficit; that is, the economic recovery and how we do meet the Soviet threat.

Mr. Secretary, I have a question that is totally unrelated to direct defense expenditures, but I think it is something that is very important, and it is important to me because I happen to be going over in the February break to Israel, and more importantly, to the Marines in Lebanon.

## MARINES IN LEBANON

Can you shed any light on the situation in Lebanon? How much longer do you think the Marines will stay there? What about some of the reports of conflict that is apparently going on, potential conflict with our troops and others? is there any light you can shed on this to the committee today?

Secretary WEINBERGER. I will have to engage in some prophecy, and I have never been very good at prophecy. Essentially the mission of the Marines and the mission of the multilateral force has been to try to insert between two very closely locked warring powers in a third country a force that can give confidence to the efforts to bring about peace and to withdraw all of those foreign forces from Lebanon. That remains their mission.

Their length of stay obviously will depend on the length of time that those foreign forces remain in Lebanon. All of our diplomatic efforts at the moment are directed toward trying to get all of those foreign forces out of Lebanon and, on the military side, to strengthening and training and helping the Lebanese armed forces so they will be able to preserve sovereignty within their own country and strengthen themselves so that they can keep foreign forces out of the country in the future.

With that as the mission and that as the problem, it is a little hard to tell you the date on which the Marines will come out. They will come out the instant their mission is complete, as they did before. Their first mission was to get Beirut cleared of the Palestinian liberation group. Within a day after the last PLO got onto one of the evacuating ships, the Marines left, and the multilateral forces.

So at the earliest possible opportunity when the conditions they went in to secure have been achieved, they will leave.

Senator **Quayle**. Are the Marines going to be there until all foreign forces are withdrawn from Lebanon?

Secretary **Weinberger**. I do not think that you would necessarily have to get each last individual out, but you would certainly have to have this process to take place, Senator. You have two forces that are very close to each other within small arms range. That is a very explosive situation. There have been incidents and undoubtedly will be more. As those forces withdraw, if we can get some kind of a plan worked out—bear in mind that both the Syrians, the Israelis, and also the PLO have all said they want to leave, and the Lebanese say they want them all out; so everyone wants to see the same things—but as the plans are developed to disengage those forces and to move them back, either in some kind of a phased program or simultaneously or ultimately to the point where they reach their own borders and retire from Lebanon, during that process it is necessary to have some force that can give confidence to both of those two warring forces that the terms of whatever agreement they make are going to be carried out.

We have all read numerous times that cease fires have been broken. We try, when we get that kind of agreement, to make sure that the uneasy peace that has been achieved is maintained, that we can withdraw these forces with full confidence that somebody will not start shooting and that the multinational force can be inserted between them.

As the forces withdraw, larger and larger areas are uncovered and more of the multinational force may be needed. But when the withdrawal is completed, and I hope it can be completed very soon and I don't think anyone hopes that more than I, then our portion of the multinational force can indeed be withdrawn. We may have to maintain some kind of a training and assisting ability to aid the Lebanese armed forces. That is a different thing. That would also be in the interest of peace and the interest of getting the Lebanese forces as strong and able as possible to maintain the security of their own country.

### NEGOTIATING LEBANON SETTLEMENT

Senator **Quayle**. It seems to me, if I read your response, which has been very careful and exact, that what we are saying is if these negotiations do not come to some concrete settlement to see the total extraction of all foreign forces from Lebanon, that it looks like a presence of the United States is going to continue in Lebanon. If so, it would appear to me that we will be there for quite a considerable time, even though our preference would be to get this resolved as soon as possible. You seem to be getting the same feeling that I do that things are not rolling along as far as getting a negotiated settlement to withdraw those foreign forces, which means to me that those Americans are going to remain in Lebanon for quite some considerable time.

Secretary **Weinberger**. All of our efforts and all of our diplomatic efforts, strength, and skills are devoted toward bringing three groups together, actually four, in a very complex negotiation that will result in the elimination of all foreign forces from Lebanon. The preservation and maintenance of peace in the Mideast is a critically important part of our program. This is certainly one of the major elements in securing that peace.

If you have a continual set of boiling points that boil over in Lebanon or in the Mideast with additional Soviet involvement in Syria and all of the ingredients, you can get a conflagration started very easily that will involve far more than Lebanon. That is an extraordinarily important part of the President's whole foreign program, foreign policy, and strategic policy, to get Lebanon cleared of foreign forces and leave behind a Lebanon with the capability of defending itself. The sooner that can be done, the better.

There were a lot of people who felt the PLO would never have gotten out of Beirut and that there would be a massacre if they did not leave and that we could not do any good with the 1,200 reinforced Marine amphibious units and so on. Well, within a very few days, less than a month, really, that situation was cleared. This has taken longer. It is a bigger problem, a more difficult problem, but it is a problem which is directed toward a situation which can mean the removal of the multinational force, including the Marines. Obviously, all of our efforts and all of our hopes are directed to accomplishing that just as soon as possible.

Senator QUAYLE. My time is up, Mr. Chairman.

Chairman TOWER. Senator Hart?

### 1984 FISCAL AUTHORIZATION

Senator HART. Mr. Secretary and General, much of the attention of the hearing has been focused on the impact of the 1984 fiscal authorization. I would like to look farther out, 3 to 5 years from now, because I believe that is where the serious implications of this budget lie.

I think there are three areas where those considerations will come to roost. One is a serious pinch brought on by growth in the wide range of so-called big ticket items we are buying this year.

What we have here are large doses of budget authority with small outlays. We all know the cost of the systems will not occur in fiscal 1984. They will occur 3 to 5 years from now. But that is when the deficits will be the highest.

It seems to me that we are in the very serious danger of substantially underestimating the procurement costs of these weapons systems we are ordering this year.

I want your response to that. I particularly want to know a little more clearly your response to I think it was Senator Cohen's question this morning about whether you will make available Mr. Spinney's study of cost growth and on this procurement pinch available to this committee.

### COST GROWTH PROBLEMS

Secretary WEINBERGER. We are aware of the procurement problems and the fact there have been overruns in the past. I do not know if you were here all morning, Senator, but as I explained then, we have instituted a number of management initiatives and other procedures designed to reduce and, we hope, eliminate cost overruns. You will never be able to reduce inflation no matter how low we get it, but we can do a lot of things about not changing designs several times in the middle of a procurement program and managing program more closely, getting better contracts to start with, putting a lot of the burden for increases on the contractors and things of that kind, all of which we think can reduce very substantially some of the factors that have led to overruns in the past.

Another thing that has led to overruns is start and stop financing, where we will start with an economic rate of production plan and, because financing is turned off the second or third year, the unit rate of production then goes up very drastically, and you have to either get fewer units for the original money or pay much more for the original total desired. That is another of the factors that has caused a lot of the increases in the past.

We have tried to budget honestly and put in the amount we think will be actually required, manage very closely, and stick to our estimates. That requires a steady application of the funds provided over a 5- or 6-year period, or whatever the procurement period for that specific item would be.

Senator HART. Mr. Secretary, will you make available to the committee the studies which indicate that you have seriously underestimated the cost of these weapons systems?

Secretary WEINBERGER. There are no studies of that kind, Senator. They are data, and you are welcome to them. They project on the basis of past mistakes that we are going to make all those same mistakes in the future. They are not studies that show we will overrun in the future. They are studies that show that if we do not change our practices, as we have done, we can run the same risks.

There are also studies that show that if Congress changes the financing pattern and frustrates our ability to get the savings that can occur from multiyear procurement or regular steady applications of resources then we will indeed have overruns.

Senator HART. Mr. Secretary, I think we all agree here, with the exception of you, that the projected costs of this defense buildup are not going to be afforded in the time we are talking here; so, in effect, that decision has already been made. I think in reality we are both missing here the fact that almost to a person people are saying given the projected deficits and the need for a more stable economy and the need for a more stable fiscal and monetary mix, that you will not be able to afford these systems that you have with the small outlays in 1984.

It seems to me you are answering your own question here. Congress is telling you or it seems to me we are beginning to tell you that we will not be able to afford these weapons systems, so the fact you say the error we should not make, we are going to make.

Secretary WEINBERGER. I am still counseling that you should not make it, Senator, and trying to give you the encouragement that the internal practices of the Department have changed materially. If there is a steady application of the resources, if there is steady support in the way of authorization and outlays, you cannot only improve the economy substantially but you can also prevent a lot of the sudden surges of costs that come from reducing the actual rate of production.

Senator HART. Mr. Secretary, I want to take strong exception, and with all due respect, I think it is a phony argument to use a defense budget as an economic stimulant. I think almost everybody agrees you could use the same dollars in repairing the deteriorating public facilities of this country and put people back to work.

Secretary WEINBERGER. When you were not here, Senator, I put several cautions in, I do not think you should spend one nickel from Defense to stimulate the economy. I think that you would come to a false conclusion if you assumed that defense spending is bad for the economy. It clearly is not. It does not reduce the deficit dollar for dollar by any means while it does reduce spending in States where there is high unemployment now.

You are not accomplishing an improvement in the economy, but I agree with you totally you should not spend a nickle of defense money to stimulate the economy, and we are not doing that.

Senator HART. I understand the answer to my question that that study will be made available to the committee. I look forward to seeing that.

I look forward, in addition, to seeing the study on the readiness problem. Over the period of time we are discussing here, 1981 through 1987, procurement percentages of the defense budget go from 39 percent at the same time operations and maintenance go from 33 to 25 percent. While we are buying more complex and more difficult to maintain and operate systems, we are cutting them out of money to operate.

Secretary WEINBERGER. No, sir. You are not cutting out funds to operate them. You are right about the percentage, but you are wrong about the money. The budgets go up, and the percentage does drop because you do acquire a great deal of needed spare parts, and you start building the ammunition reserve. You do not need a higher percentage. But you are quite right. We should not cut that.

### RETENTION

Senator HART. The third is a retention problem. Beyond procurement readiness I think the promise to the troops that we will keep faith with them in fiscal 1985, based on those I have had some contact with at Fort Carson and other places, they are not taking too kindly to that, as I am sure you know. I think many of them would agree with many of us that what is more important to a successful defense and national security is a manpower force that believes its government stands behind it. And I think they frankly feel that is more important in terms of predictability of their own personal security than perhaps the MX missile or the B-1 bomber.

Secretary WEINBERGER. Well, again, Senator, when you were not here we did have a long discussion about that. We are all agreed that it is a very unfortunate thing that economic conditions have compelled a Government-wide program as recommended by the President to put caps on not just military pay, but pay of all Government program recipients and to do it for this particularly difficult period of time.

We have also stated many times that it is my intention and hope to try to make this up to them in fiscal 1985. I have to say that soldiers, sailors, airmen, Marines to whom I have talked—obviously there have not been many because it has not been announced for too long—but I have been encouraged by the kind of morale and the kind of understanding of the Government-wide nature of the problem that I have seen. That leads me to be very hopeful that this sacrifice will not be asked for in vain.

Senator **HART**. Well, Mr. Secretary, all I can say is if we all focus on this budget, which in my judgment is totally out of whack for our national priorities, and neglect the outyear implications of it in all these areas, that we are courting a disaster and a weaker national security in the 1980's rather than a stronger one.

Secretary **WEINBERGER**. I certainly agree we should work together, and I certainly agree that we should pay attention to the out-years, but I also note that it is in the out-years that we will be receiving, if we keep going, the added strength that is necessary to enable us to maintain a credible deterrent.

Chairman **TOWER**. Senator East?

Senator **EAST**. Thank you, Mr. Chairman.

Mr. Secretary, I welcome you and of course General Vessey. It is a pleasure to have you here. This is the first time as a new member of the Armed Services Committee to talk to you face to face in public, and it is my pleasure.

I would personally like to commend you for the quality of leadership that you have given in the Defense Department. I believe you have been one of the great sellers of this administration. You are an extraordinarily competent man who states his case very well, and I think even his critics have to concede to you that you do it in a very effective and low key and gracious way. So I think at least the record should show that I feel that you ought to be publicly commended on that.

Secretary **WEINBERGER**. Thank you very much, sir.

Senator **EAST**. I also feel, Mr. Secretary, that you are correct in indicating that it is your responsibility to focus on the threat as you perceive it, even though you may have your critics, and to focus on the need, as you put it, even though, you will have your critics.

I think we need to remind ourselves sometimes in the Congress that the idea that defense and all of the other areas that we must work with, as important as they are, are of equal value. Sometimes we need to remind ourselves that under the U.S. Constitution that it is a prime responsibility of the U.S. Government to provide for the national defense, and no other level of government in the Federal system under our Constitution has that responsibility.

I do not wish in saying that to slight programs in other areas, but the word "priority" keeps cropping up. Often in other areas State and local governments can assume greater responsibility and historically and traditionally have, but if the United States and the Congress, the Federal Government, the National Government, the Central Government, the one here and now does not provide for the national defense in view of the genuine threat and the genuine need and the realities in the world today, it does not get done. It is as simple as that.

So I think you are absolutely correct in pointing out that the threat is genuine, the need is real. There was neglect in the 1970's, as you put it, a decade of neglect. I think you are right in suggesting that the great growth in Federal spending does not come in defense; it comes in nonspending areas.

What you are trying to do, as I understand it, in the administration is to restore that imbalance. Personally, as one Senator of this committee and of the U.S. Senate, I agree with you it needs to be restored. The threat is genuine. The need is real.

I think when Senator Goldwater said earlier that this is somewhat reminiscent of the period, perhaps of the period in the 1920's or 1930's when it was fashionable to minimize the threat from the totalitarian right and pretend it did not exist and talk about the merchants of death and those exaggerating the threat. We learned in December 1941 it was the other way around, that it was a self-inflicted weakness—isolationism—which brought about instability, encouraged adventurism and plunged us into the worst war we have known.

I think again—I just speak for myself—the threat from the totalitarian left is genuine. It is not imagined. It is real. We neglect it at our peril, and I would submit that the greatest contribution to peace and stability in our time is a United States that has a genuine credibility and is so perceived, because absent that we contribute to instability in the world, and we encourage Soviet adventurism and the adventurism of her proxies such as Cuba. Those are the realities as I see it.

Now, all of the Senators will say everybody has their different view of reality, but to me that is not an inaccurate picture of what is occurring. I am not trying to put words in your mouth. You can describe it in your own way. But I do feel that you ought to hang tight.

As Senator Humphrey has said here earlier today, if the Congress chooses not to do what you think should be done, then so be it. But it certainly is not your responsibility to cooperate in this mismanagement of our national resources and our national responsibility.

So I do genuinely hope that you will continue to do the very effective job you are doing in trying to educate the American public on what you think we ought to be doing. If we decide not to do it—that is, we in the Senate, the Congress collectively—then that is our responsibility, but it is certainly not required or mandated under the Constitution that you be dragged into complicity with us, and then subsequently it will be said oh, the Secretary of Defense himself said it would be all right to do this or that.

There is no unwritten law that says we will in fact have to cut defense spending. It will be determined by the U.S. Congress.

So again I commend you for standing firm. Some may say you are inflexible, but I say no. I think what you are responsible for doing is stating it as you see it and then letting us be responsible for it.

I realize my time is brief, and it is running out, but I would like to ask one question and then I will cease and desist. It is a common assumption to hear people say, and you said it today—and I do not wish to belabor the point at great length—that we do not wish to be superior.

I have often wondered why that idea has crept into American strategy. I realize people should not go around beating their breast saying we shall be superior, and we shall strut around the world. But on the other hand, in the kind of world in which we live, to seek superiority when in fact an adversary is seeking it, I really do not know how one avoids doing that.

I would submit that in 1941 if we had been the superior war power of our time and so perceived, we would not have had a World War II. In 1945 we were the preeminent military power in the world. We were in fact to wit superior. It was a greater contribution to peace, stability and freedom in the world. It seems to me it is the old story: if you aim for equality, you will probably end up being inferior.

### MILITARY SUPERIORITY

The Redskins are celebrating their return here this afternoon. I do not wish to compare national defense and international relations, but I am sure the Redskins did not prepare for equality: they prepared to win. And I do not see why we cannot as a matter of defense strategy say we seek to be superior in this sense—not that we are adventuresome, not that we will engage in the first strike, but that we have military superiority, and that would be a deterrent more than any single thing because there would not be anything uncertain about it. It is the uncertainty in international relations and in our defense capability that creates the instability and the adventurism and the potential for war.

I would just appreciate your brief comment on this idea. Do we not in fact not seek superiority over the Soviet Union or anyone else? But as a military policy why would not the leader of the free world seek military superiority?

Secretary WEINBERGER. Senator, first let me thank you for your very nice statements about me, and let me comment about the really cogent and effective statements you have made generally about these matters. I agree with them fully.

On the superiority, in the 1950's we had a degree of superiority on land, sea, and air that gave us the ability to guarantee the peace.

### UNITED STATES—A STRATEGIC UMBRELLA

As a result, Europe and our other allies, Japan after World War II, found it unnecessary and indeed in Japan not possible under their constitution, to make any provision for their own strategic defense, and we raised the strategic umbrella over them and had a degree of superiority which preserved the peace of the world in an absolutely guaranteed fashion.

Now that is a heavy burden to maintain. Over the years, as we have seen, particularly in the decade of the 1970's, the national desire and the national policy was that we should not continue that. We therefore got in a state of imbalance. To regain that now would require a budget which would have the effect of perhaps galvanizing even more people than we seem to have alarmed by the very moderate and appropriate request we have at this time to continue on the path of trying not to regain superiority but to maintain the degree of strength that will deter attack.

To regain superiority would require the expenditure of resources and the maintenance of forces that this country does not want and will not tolerate. You are quite correct, when it was there in the 1950's it was an absolute guarantee because the United States would not use that power in any sort of a first strike.

That was widely known and widely understood. And all of the economic recovery we have seen take place in Europe and elsewhere was managed under that umbrella with a greatly reduced need for military expenditures by many of those countries. That was the period of the world in which peace, freedom, and security were more realizable than seems to be the case now.

Now, what we are trying to do it to catch up on both the technology and the military strength, to give us capability to continue to deter attack. For that we do not need superiority, we need a degree of forces that is hard to define. It is a terrible set of equations. We have to work with it all the time.

As you correctly say, I have the responsibility for not being very wrong at any one time in the calculation and the casting of these equations. That can preserve a balance that keeps things in sufficient suspense so that we can maintain deterrence and be confident that we can maintain it.

That is what we are trying to do now, but we are not trying in this budget to acquire inordinate amounts or anything of the kind. You saw in the charts this morning that our requests fall far under the annual average increments the Soviets have added in virtually every type of weapon, and that is one of the problems we now have as a result of a policy in which we decreased defense spending by nearly 20 percent in the decade of the 1970's in real terms, and increased nondefense spending and the allocation of our remaining resources by 122 percent in real terms during that same decade.

Couple that with what the Soviets did for two decades and you have the dilemma we face now. It is not a pleasant one. It is not a popular set of policies to advocate. But I do not want to have the responsibility for having said in the interest of being a good fellow and compromising and accommodating and being willing to go along and recognizing the inevitable and making the inevitable happen, that I shirk my responsibility to advise the people, the President, and the Congress of what seems to me to be necessary to regain enough military strength in the world.

Chairman TOWER. I am sorry, Senator, your time is up.

Senator Wilson?

Senator WILSON. Thank you, Mr. Chairman.

Mr. Chairman, I gather that since you extended your generous invitation this morning, you have not been overwhelmed by suggestions from members as to closures and bases in their States.

Chairman TOWER. I have had no responses.

Senator WILSON. It would suggest that this idea that there is some economic stimulus from defense spending has infected even the Members of the Congress.

In fact, it reminds me of the story about the inmate on death row who, when asked what he wished for his last meal, ordered strawberries and was advised that they were not in season, and he said, that's perfectly all right, I will wait until they are.

I would suggest that by March 1 the suggestions you are soliciting may require a similar exercise of patience on your part, Mr. Chairman.

Mr. Secretary, to someone who has deservedly won the reputation of Cap the Knife, I dare say you are grateful for all the assistance that has been forthcoming to try to cure you of your spendthrift ways. Let me say I do not want to belabor a point that was made earlier by some of our colleagues. We are obviously concerned, as you are, as the President was I would think, over the ability of the Armed Services in a technological age to maintain senior skilled personnel, particularly when we are competing with more attractive wages and benefits from the private sector.

## FLEXIBILITY IN PAY STRUCTURE FOR SPECIAL SKILLS

Let me just ask this. This may not be possible. It may not be well advised, given the difference in the structure of the Armed Services. But has any thought been given to trying to copy what the private sector has done in some instances to introduce some flexibility in pay structure that would permit the Armed Services to narrowly target for retention those special skills with which they are competing in the private sector?

Secretary **Weinberger**. Yes, Senator. We have a number of special bonus and inducement provisions for rare specialties and specialities we have some difficulty in filling. And they are part of the overall wage structure. There have been suggestions that we should pursue this further, that we should, in any scarce military occupational specialty where we have had major shortages for some time, offer inducements and bonuses and things of that kind. We have done that to some extent.

I think it may well be that greater bonuses and special incentive pays may be necessary in the future. We are in the very happy position at this time of having most of those difficult areas reasonably well filled and, as I have said, having actual waiting lists in many of the recruiting offices for enlistment generally.

Retention is a very important point because after you get people trained and skilled, they become even more valuable. So we have had reenlistment bonuses to try and insure that those special skills stay with us. Those are the skills General Vessey cited earlier this morning, that we find extremely gratifying that the retention rate has risen markedly, as has the quality and education level of recruits.

So I think we are now in very good condition. But those are suggestions we have followed to some extent and we are examining the infantry bonuses and things of that kind so that we can implement if shortages develop.

Senator **Wilson**. Looking at the fiscal year 1984 budget, in the introduction you have made the statement that readiness and sustainability continue to be the first priority.

At page 5 of that same release in discussing the defense acquisition improvement program, you set forth I think some rather impressive statistics, noting that with the multiyear procurement proposals you have been able to buy in more economical lots. And you made the statement: Where capacity exists or will be financed by industry, we are producing weapons systems and equipment at more economical rates with resultant lower unit costs. We are advance-procuring extra components and tooling for two missiles and an aircraft engine to develop a production surge capability. We plan to follow this program with others. While all these innovations require large up-front or near-term expenditures, the significant outyear savings in our weapons systems' costs warrant this initial investment.

My question really relates to not just the obvious cost benefits that have accrued from following these practices, but really to the concern about the timeframe necessary. When you speak of a surge capability, it has obvious application with respect to problems of procurement. I commend the department for advance-procuring the extra components and the tooling that would permit you to greatly expand production when the surge requirements should arise.

### READINESS AND SUSTAINABILITY

The question I have is: If the first priority remains readiness and sustainability, if we are talking about things like steaming hours, like live firing, then clearly the only way to reduce those costs, and admittedly to reduce readiness and some sustainability, is to reduce force strength. My question is: Given the very hard choice—and I know your first answer is we should do neither—but given the very hard choice, looking at a requirement for a surge capability with respect to readiness and with respect to procurement, not just of strategic weapons but nonstrategic as well, does not the timeframe that is involved in procurement argue that if the hard choice must be made, that it must be made in favor of giving that surge capability to procurement? Can we not train people more readily and faster than we can procure and produce weapons?

Secretary **Weinberger**. It is not a question of training people faster, Senator. It is a question, as you said originally, of having the tools, the parts, and the production lines and all the rest. The difficulty in your question is making a choice between making ready what we have in favor of having everything we need, because you know that what we need now will cost a great deal more in the future. So we make long-term savings by higher obligation authority in the earlier years and place orders on a multiyear basis. This enables us to go out and get the parts, and the tooling and arrange to have the labor force standing by, to identify them and keep the production lines going so that we can get what we now need at the lowest costs and best production rates as quickly as possible.

So it would do little good to abandon the changes we have made now when we know that to go back to our old ways of doing business would make things a great deal more expensive in the future. For example, last year we had quite a struggle, and we eventually won it, to secure the authorization for two carriers. This was attacked most of the year by a lot of people who thought it was much too high an obligational authority.

We know we are going to need two carriers in 8 or 9 years. We know with all of the international commitments we have—and nobody has yet suggested which one we should give up—because we will not need them.

You had authorized two last year. We can get two on line much sooner, and we can save ourselves almost $1 billion in total cost for those two carriers.

### SEEKING HIGHER AUTHORIZATION AUTHORITY

To my mind, that is a strong argument, and the final argument, as to why you should seek higher authorization authority to get the things we need most and get them sooner and at $1 billion less in cost. This also applies to a lot of the multiyear procurements.

We have a multiyear procurement for the B-1, for the LST ships, for various communications equipment, reengineering of tankers, and things where we are quite sure we can make savings. That does not require more total outlays, now, while it requires less outlays in the outyears. It requires less obligational authority this year because that is the only way you can get your real savings.

Senator WILSON. I have no argument with that. I am persuaded that is the case. But I am saying that perhaps because that is true and also because of the timeframe involved in the production of equipment, that there is a hard choice to be made and perhaps it should be made in favor of having a smaller force so that you get lower operating costs.

Secretary WEINBERGER. Senator, what I am trying to do is give you arguments to refute that argument.

Senator WILSON. I knew I could count on you doing that.

Secretary WEINBERGER. We have no way we could justify to our allies or to ourselves, and no way we could change the unfavorable nature of the signal we would send, if at this rather critical juncture in the world system we started to trim down divisions, give up an airwing, not complete construction, or not put to sea ships that are planned and are needed.

You have to bear in mind the deployment capability that would be lost and the danger that would be involved for the national security. When you consider both factors it seems to me the very worst way to deal with economic conditions which are difficult is to make them worse by adding to unemployment and reducing your revenues and thereby adding to the deficit problem.

### ANDROPOV COUNTERPROPOSAL

Senator WILSON. My time is up. If we have a second round, Mr. Secretary, at some point I would invite you to comment on the Andropov counterproposal that we limit our intermediate nuclear forces, that NATO limit theirs to those presently in the arsenal of our French and British allies. I would be very interested in hearing your analysis of that proposal.

Secretary WEINBERGER. I hope I will be able to do that either now or later.

Chairman TOWER. Gentlemen, that brings us to the second round. There is a record vote on the floor at 4 p.m. I would hope we can finish the second round by 4:10 p.m. and adjourn the hearings for today. If not, we will return. In any case, I propose we limit the second round of questions to 5 minutes and proceed on that basis in an effort to finish.

Senator Stennis?

Senator **Stennis**. Yes, Mr. Chairman.

### INFERIORITY COMPLEX

Mr. Secretary, I am on your side. And I want to keep leaning that way and keep on that side, but I declare all this magnified doubt about our position, this inferiority complex, I do not agree to it at all. I do not think it is correct in fact. I think we are superior, to be frank about it. We have not lost anything.

I really do not see anything that would lead me to believe that they have a superior navy to ours. That is not what the Navy people say—all of them.

There were different statements here from the Chief of Naval Operations, dated May 1982. Time has been limited here now, and I cannot read it. But I would like to put it in the record.

[The information follows:]

There is no doubt in the mind of our Chief of the Air Force, General Gabriel, when he said in official testimony here on May 19, 1982, "I have been associated with the air forces of other nations; there are none better, believe me, than the U.S. Air Force." That is the man responsibile for all our nuclear ICBMs and bombers as well as our fighter and attack aircraft who is speaking.

There was no doubt in the mind of Admiral Watkins our Chief of Naval Operations when he testified before us on May 19, 1982, when he testified about the American "blue chips of superiority." To the question, "What are the Russians afraid of?", he answered, "Our superior tactical air at sea is number one . . . Our superior SSN submarines are better—probably 5 to 8 years in technology . . . We have a superior cruise missile which the Soviets cannot emulate . . . We have an amphibious force that they cannot match . . . Weapons systems individually in my judgment, are superior to the individual weapons systems in Soviet combatants."

Senator **Stennis**. Also the Air Force Chief of Staff. I do not want to be personal, but I have known these men, Mr. Secretary, for years. They are not friends of mine. I did not cater to them, and they did not cater to me. But they do feel free to talk to me, and they do. They do not feel we are in an inferior position.

We have been urged for more money by them freely, but I think we got out of that predicament. We have the strength now except in this field I mentioned. We have a lot of talk about the tanks. We will not go into that. There are differences there. But I hope we do not try to spend as much as they have spent in tanks to match them number by number.

I think every dollar we have to pay for this purpose we have to borrow for a good number of years. As I say, I want to be with you and support you on these figures. And I know you cannot be certain.

I am greatly concerned about our capacity and our development in the long-range nuclear missile capacity. We do not seem to be able to get at a basing mode with the money there, not only in our administration but in the preceding ones. You have the money there now for research and development. The other is available at the drop of a hat.

I do think the MX missile could be approved if there was a little more known about the basing mode.

## INTERCONTINENTAL BALLISTIC NUCLEAR POWER FORCE

The facts are well-known, it seems to me. We have got to overcome this problem with this one intercontinental ballistic nuclear power force. And I think we should concentrate on that like we did the space program and solve it. We have been hearing about all these great efficiency since 1980. When Eisenhower was President, he ran on the party in power. In 1960, there was the missile gap. I never did buy that. But I did race back to see what the proof was. And we never had bought it.

I think we have to get our feet down. I want to stay with you on whatever you actually need. If there is any way to get a better answer to the missile problem, that would be wonderful.

Chairman **Tower**. Senator Warner?

Senator **Warner**. Thank you, Mr. Chairman.

## ARMS CONTROL

Mr. Secretary, on the subject of arms control, the distinguished Senator from Georgia put in an amendment—I joined him at the last session—requiring the administration to come forth with certain comments on what we call confidence-building measures. It is my recollection that that report was due, I believe, today.

I would yield to my distinguished colleague from Georgia, but my recollection was it was due today and I was hopeful we would have it here for examination. I hope the failure to come forward timely with this has not manifested any lack of support.

Secretary **Weinberger**. No.

Senator **Warner**. In particular, I am concerned with the joint communications link. I am hopeful we can strengthen the communications link between the Soviet Union and the United States. There are a variety of steps that I firmly believe we could take which would reduce the risk of any accidental confrontations between the two superpowers.

Secretary **Weinberger**. There is no problem at all, Senator, about any lack of support. I was talking to the Senator from Georgia yesterday, and there is full and complete accord on the need for better measures, confidence-building measures and improved notice, and improved means of trying to avoid any ambiguous warnings or accidental problems, and to certainly improve the technology on the Hot Line. Our only delay in response is because of the need to coordinate with the Department of State, the National Security Council and others, and that does take time.

We have no doubt whatever that this is an extremely important area. And I congratulate both you and Senator Nunn on the initiatives you have taken to move this along. We certainly support that and join in it. I have talked within the administration about the importance and the need to do this as quickly as we can.

We are doing a lot of work on what might be called the technical side of ways we think about crises, sometimes involving even multinational crises, planning for the potential movement of troops, ships, and planes. All of the things that go into what we call these general confidence-building measures are an extremely important part of the whole process.

Senator **Warner**. I certainly hope so.

There are two questions I will state for the record. I hope later on you will have an opportunity to answer them.

Are you considering any reorganization within the Department of Defense itself? We have focused attention on the JCS. I just wanted to give you this opportunity.

Secretary **Weinberger**. We have the JCS proposals and we are considering them.

Senator **Warner**. I was addressing the civilian side.

### ELIMINATING DUPLICATION

Secretary **Weinberger**. On the civilian side we do have a number of areas we are looking at. One was identified by Senator Jepsen on the general health side. We are looking constantly at both organization as well as deployment and various tactics to eliminate any kind of duplication within the services.

Senator **Warner**. How about the structural organization of the DOD itself? Are any changes contemplated in that area?

Secretary **Weinberger**. We have made some already, and we do have a bill before you for assistant secretary positions that would enable us to improve the internal organizational structure.

### STATUS UPGRADING THE F-14

Senator **Warner**. The last question: In view of your comment on the two carriers, I have been following closely a subject of over-the-horizen in the air battle. I am concerned that we are not moving as fast with the deck loading, mainly the F-14 upgrade, and possibly the F-18, to keep pace with this enlargement of our carrier force. What is the status of the upgrading on the F-14?

Secretary **Weinberger**. There are funds that are requested for that in the budget and some I believe in the multiyear procurement. I do not know if the F-14 is in that category this year or not. But we do have an upgrading of those planes. And we have an upgrading of radar and the other facilities and improvements that are involved in the Aegis cruisers and others that increase the ability of the carrier task groups to defend themselves.

### F-18 STATUS

Senator **Warner**. The status of the F-18?

Secretary **Weinberger**. The F-18 has had some of its preliminary evaluation tests. The DSARC is still awaiting final decisions by me. We are gathering a number of other opinions on it. Our new Deputy Secretary went down and flew it the other day to make a personal evaluation. We will have all that information before you shortly.

The only thing it has not succeeded in so far is meeting range-payload requirement and that can be corrected.

We will have the formal recommendation to you I would certainly think this week.

Senator **Warner**. I thank you, Mr. Secretary and General Vessey for giving the leadership to this country that is badly needed.

Chairman **Tower**. Senator Nunn?

Senator **Nunn**. Thank you, Mr. Chairman.

Mr. Secretary, before I get to a couple of questions, I want to say I appreciate your attitude toward the crisis control proposal over at the Department of Defense you made reference to. I think that positive attitude, if it is conveyed down the line, and I am sure that it probably already has been, but if it has not been, if it is conveyed down the line, I think it could make an enormous difference in the outcome.

You can get any bureaucracy to pick holes in any proposal, but the essential point is we do have much more of a mutual interest with the Soviet Union in this area of avoiding war by accident, or miscalculation or use of terrorist weapons, the whole proliferation area, than perhaps any other.

I happen to believe that in the short term at least that we have a better chance at having some kind of agreement with the Soviet Union in this overall area of confidence-building, including this crisis control idea, but not limited to that, than any other area. So I hope that positive attitude trickles down in the Department of Defense.

Secretary WEINBERGER. Senator, it is not only trickling down, we are trying to get it to trickle upward and outward into the other departments and areas of Government concerned. I agree with you fully on it. The point you just made is an extremely important one, and it is one of those areas where we are more likely to get general agreement. There are few people opposed to this.

I think your and Senator Warner's initiatives have been extremely good. We are very supportive of them and the people who work in the Department are aware of my feelings on the subject. And what we are trying to do now is convey the importance and wisdom of this to all the areas of the Government.

Senator NUNN. Thank you very much, Mr. Secretary.

### MEETING LONG-TERM GOALS OF WORLDWIDE WAR

General Vessey, before on my last question I asked Secretary Weinberger about the statement in last year's posture statement and again in this year's posture statement, although it is moved considerably toward the back in this year's statement—I do not know the significance of that—about our long-term goals is to be able to meet the demands of a worldwide war, including concurrent reinforcement of Europe, deployments to Southwest Asia and the Pacific, and to support other areas. It goes on to say that our long-range goal is to be capable of defending all theaters simultaneously.

I note in your statement, the Joint Chiefs' statement, and I quote it at page 5:

> With regard to global responsibilities, U.S. forces are obviously not available to defend everywhere against every threat at all times. U.S. military strategy does not envision that approach.

It would seem to me that there is at least some conflict between those two statements. Can you reconcile the apparent difference there?

General VESSEY. I will try, Senator. What the Secretary said, if I heard him correctly, is that by the end of the decade he thought we would be able to deter attacks in these areas.

Senator **Nunn**. What I understood was he said that the long-range goal would be met or he hoped it would be met within this decade. I asked him what he thought "long-term" meant, and he said 10 years.

General **Vessey**. I listened very carefully because I suspected you would ask me this question later on.

Senator **Nunn**. You were correct.

### DETERRING WAR

General **Vessey**. As it says in the Joint Chiefs' statement, we do not have the forces to fight the Soviets on all fronts at the same time. One does not need to do a lot of arithmetic to figure that out when you look at the 100-plus divisions of the Soviets. If you look at the 28 divisions we have, we are not going to fight the Soviets on all fronts at the same time. We will not be able to do that in a decade. Our strategy is one that says we will deter war by use of alliances, central reserve of forces, superior intelligence, command and control, and mobility.

And we will, by making it clear that we have the ability to respond either by reinforcing alliances or by going elsewhere in the world where we might be challenged. In that way we would then deter war. We do not want to fight the Soviets anyplace. We want to make it clear that we can respond to the challenges we have. We have to do it with the forces we now have, meeting the challenges one at a time or in some such manner.

Senator **Nunn**. In some sequence.

Let me ask you this then——

General **Vessey**. But by being able to do that, by demonstrating that we can respond in all those areas, we believe we can deter war.

Secretary **Weinberger**. Senator, I do not believe there is any conflict or any——

Senator **Nunn**. If I could interrupt, my time has just about run out.

Secretary **Weinberger**. I just want to associate myself with those statements.

### STRATEGY AND RESOURCES GAP

Senator **Nunn**. Right. I am glad those two are reconciled. I just wonder if we ought to reexamine that posture statement and that goal, because now you are both saying we are not going to reach that goal at the end of the decade. If we are not, you are going to get another big series of headlines sometime this year that even though we are putting enormous resources into the defense budget, the gap between strategy and resources is growing.

Everyone of the operation chiefs of the services last year said the gap was growing despite the additional resources. Now, that is a kind of discouraging word that I think undermines defense consensus. So I would hope you would relook, Mr. Secretary, at some of these statements in there that can be so misleading unless they are qualified about what our goals are and what our strategies are.

Secretary **Weinberger**. We can do that, and we certainly do not want to have any more statements that can be taken out of context or twisted in a way that distorts what we are trying to do. Essentially what we are saying, Senator, is our own forces, have to attain a sufficient degree of deterrent strength by the end of the decade, particularly the strategic ones.

We do have, as General Vessey said, the hope, the expectation and I think reasonable expectation of having a number of allies with a number of strong resources that can join us. We have to recognize that it is within the Soviet capabilities to move on more than one part of the globe at once. To deter that we have to have a correctly perceived ability to respond to that. That is really essentially all we are saying.

I think we are moving toward that path in a way that will get us to a degree of sufficient deterrent strength by the end of the decade. We cannot rest there, and we do want to make sure that our allied strength's contribution remains high.

With all of these things taken together I think we can do what we have to do within that period, but we will have to get additional capability into the 1990's because we are assuming Soviet positions will remain static.

Chairman **Tower**. Your time has expired.

Senator Quayle?

Senator **Quayle**. Thank you.

### STATUS OF MX MISSILE

Mr. Secretary, can you give us the status on the MX missile and the Scowcroft Commission and how it is going to report and some dates it will be coming up to us?

Secretary **Weinberger**. The Commission will report to the President. I do not know when, but I hope sometime this month. The President is under direction to report to the Congress after March 1, and I am sure he will do that. I do not know what recommendations they will make, but what we want is to continue the development and the production of the missile and get it into the ground where it will add to our deterrent strength because it will for the first time give us the accuracy and the yield, and the number of warheads to pose a deterrent to the Soviet Union who at the moment have the ability to destroy a large part of our Minuteman system.

Because of the accuracy we have now and the yield and the hardness of the Soviet targets we do not have a comparable capability to destroy the Soviet system. That is one of the areas where we are out of balance now. That is one of the reasons that we have to have the MX missile as quickly as possible.

### MX BASING SYSTEM

You spoke about failure, Senator, a moment ago. I would suggest that one of the failures is the failure of the Congress to appropriate the money to keep the peace keeper production going. We are perfectly content to have a Commission examine it and make recommendations to the Congress. You should know that there is no perfect basing system, given Soviet technology, accuracy, and yield. There is no invulnerable magic system that anyone can guarantee will always survive. What we need is a higher degree of survivability than we have now, so we will be able to maintain a retaliatory strength. That is what we have recommended before, and that is what we would hope to recommend in one form or another to the Congress soon and hope that the Congress will agree to the necessity of deploying this weapon and will approve its manufacture.

Senator **Quayle**. There certainly has been a failure by the Congress to agree on the necessity to go ahead with this, but are we going to get this in the supplemental appropriations, this request?

Secretary **Weinberger**. The supplemental appropriation requests an amount necessary to do this, it requests it on the basis that given the time and the desire not to let a production line lag, or have to close down, that it is important to have before you the amounts that are required to proceed with the deployment of the missile. That supplemental will come up shortly. It will be essentially the requests that were made last year that at that time I do not think it is fair to say were rejected, but it was decided to defer until the additional information supplied by this Commission is before the Congress.

### PROCUREMENT AND PROCUREMENT CRUNCH

Senator **Quayle**. Mr. Secretary, there has been a lot of discussion today about procurement and the procurement crunch or whatever you want to refer to it as. There has also been a lot of discussion about maybe stretching out some of the procurement programs, perhaps stretching out B-1, C-5, MX—you go on down the list.

Is that a viable way to look at savings, ultimately savings in the short term? I know that perhaps in the long term you get into the cost per unit; it may go up. I have heard that argument. But also might it not be advisable to stretch out some of this program, not only because of the budget crunch, but would we not also then get a better handle on what works and what does not work?

Would we not have a better fix on some of the planes and some of the problems?

Secretary **Weinberger**. You will not know that until the weapons system is delivered, although you do see some of the preliminary parts of the development. The problem with stretching out programs is twofold. First it costs you a great deal more money in the out-years which are the years many people have said they are concerned with because of the size of the deficit.

The second problem is the delay that is involved. As I mentioned, many times I do not know how much time we have. I do know that we have an imbalance now, and it is essential to try to restore a balance as quickly as possible.

Senator **Quayle**. Your emphasis would be more on the delay than the cost, would it not?

Secretary **Weinberger**. No; it is twofold, I think. When you have things you know you are going to need, then it is very poor economy to try to make some apparent but very unreal savings by stretching procurements. That was done in DOD year after year because each year is difficult, and then we did not get all the items we wanted, I think that is one of the problems. It is also one of delay.

What we are seeking are things that I think we need. Some of them we needed a few years ago. Anything that causes delay or makes them cost more I find very undesirable.

Senator **Quayle**. I wonder if you could give this committee at your discretion a cost per unit if we were to stretch out or delay, because I do know this is a serious option some people are looking at it as a way to hold down costs. If we are going to be confronted with huge costs in the outyears, we will have to rethink that, but certainly it seems to me it is a viable option we could pursue to sort of designate what these costs per unit would be, and that would be very, very helpful.

Secretary **Weinberger**. There are a number of individual programs we have if we lose the advantage of multiyear procurement or we spread out all the procurement over a longer period of time.

Chairman **Tower**. Can I suggest that that be submitted for the record, and he can respond in more detail probably than you will get in this session?

[The information follows:]

### COST OF PROGRAM STRETCHOUT

The cost of stretching a program is dependent on many variables such as the extent of the stretchout; the years in which the program is reinstated; the level of other business, both government and commercial, in the producer's facility; etc. It is impossible to provide an unequivocal response to this question. However, our experience in quantifying the impact of economic production rates indicates that for every dollar taken out of fiscal year 1984, $2 would have to be added to later years.

Chairman **Tower**. Senator Exon?

Senator **Exon**. Thank you, Mr. Chairman.

### ADVANCED TECHNOLOGY BOMBER

Mr. Secretary, would you please give us an update to the extent you can in an open session, on the progress in the development of the advanced-technology bomber? Can you assure this committee that this program is receiving the funds necessary to develop the bombers as quickly as technology will allow?

Secretary **Weinberger**. The answer to the second question is yes, sir, it is. The answer to the first question I really would like to go into in closed session with you, because there is virtually no part of that program that I feel very comfortable talking about in open session. I will say that we are applying the resources that you described to it and have great hopes for it.

Senator **Exon**. I understand, and I thank you, Mr. Secretary.

Mr. Secretary, how satisfied are you with our current U.S.-Western Hemispheric security plans given the current unrest in Central America and the potential for such unrest in Mexico? If he would care, I would like also for General Vessey to respond.

Secretary **Weinberger**. Well, again, we do believe that improvements in our force structure and in our ability to deal with problems does require improvement in all parts of our forces and particularly those required in that area.

I think that if any serious problems arose, we have the forces to take care of it; but that would require recalling strength from other theaters and weakening us in other areas.

Senator **Exon**. General Vessey?

### SECURITY PLANS FOR WESTERN HEMISPHERE

General **Vessey**. I would say, Senator, our security plans for the Western Hemisphere are fine, but security in the Western Hemisphere is not fine. As the Secretary said, if all we have to secure is the Western Hemisphere, that is fine, but if we are faced with a global threat, we have security problems in the Western Hemisphere. We have let our own backyard go to pieces unnecessarily.

The situation today is not good. If we continue to let it slide and let the Soviet surrogates—the Cubans—Cubanize Central America and the islands in the Caribbean and endanger our supply lines through the Caribbean, we are doing something we should not do. We need to pay attention to political and military aspects of the Caribbean and Central America.

Senator **Exon**. We hear a great deal today about Central America. We do not hear a great deal about unrest in Mexico. Is there anything you can say about that, or can you say——

Chairman **Tower**. Senator, I hear a great deal about unrest in Mexico.

### ECONOMIC PROBLEMS IN MEXICO

Senator **Exon**. I was down in your State about 2 weeks ago, and I heard it there.

Would you comment?

General **Vessey**. Well, I think, as Senator Tower said, there are serious economic problems in Mexico. Mexico is one of our neighbors, and we need to be concerned about the well-being of Mexico and its security. Beyond that I would not want to comment.

### MILITARY PAY FREEZE

Senator **Exon**. Let me turn just a moment to what we were talking about extensively this morning with regard to the pay freeze for the military.

Mr. Secretary, I am not sure what disposition is going to be made by the Congress of the pay freeze that you are presently recommending. I just hope, though, that you can keep it in the proper context so that we can understand what is going on.

On January 26 you supposedly put out a memorandum for consumption by the troops that said, among other things, the 25-percent income tax reduction has halted erosion to the value of the military pay freeze.

I hope that if we take some action in this area, that we could have your cooperation and not opposition. I would simply point out, Mr. Secretary, that I have analyzed the benefit of the 3-year, 25-percent tax cut on a representative Sergeant John Doe between the years 1981 and 1984, the time period when his tax rate reduction would take full effect.

Based on Sergeant Doe having a family of four and taking the standard deduction, the cumulative 4-year tax avoidance he will experience by December 31, 1984, is only $376. During that same period, given the past year's pay cap and proposed freeze for next year, Sergeant Doe will have forfeited approximately $2,800 in net allowances. That figure assumes the catchup military pay raise in fiscal year 1985 that you have pledged to work for. These are average figures of the typical Sergeant John Doe. I am not certain that he is being treated fairly, and I am not certain that we will be able to keep the best of the "John Does" who are critical to our defense posture.

Secretary WEINBERGER. We do want to keep them, Senator. We do want to work with you. And we recognize all the problems of the pay freeze this year. As I have said many times, everyone, including the President, has deeply regretted that it has to be applied universally.

Chairman TOWER. Senator Wilson?

### ANDROPOV PROPOSAL MAINTAINING I&F LEVELS

Senator WILSON. I know we do not have much time, but the question I wanted to put to you was what is your analysis of the Andropov proposal relative to maintaining I&F levels compiled by the British and French arsenals?

Secretary WEINBERGER. Senator, that is an area that is being negotiated. I should not get into it very deeply. My personal reaction is France's weapons are not intermediate range. I think the Andropov proposal is a familiar and unhelpful part of the pattern of trying to introduce irrelevant issues into the proposal.

The proposal at Geneva is for zero option. The President offered yesterday, to go anywhere, at any time, and sign with Mr. Andropov a treaty that would eliminate these weapons from the face of the Earth. I think that is the proper proposal.

Chairman TOWER. Thank you, Mr. Secretary. The members of the committee have submitted questions to be answered for the record and we would appreciate an answer as soon as possible.

[Questions submitted with answers supplied follows:]

### QUESTIONS SUBMITTED BY SENATOR WILLIAM S. COHEN, TO SECRETARY OF DEFENSE CASPAR WEINBERGER WITH OFFICIAL REPLY BY THE DEPARTMENT OF DEFENSE.

### FISCAL YEAR 1983 SUPPLEMENTAL AND ACCOMPANYING RESCISSIONS

Senator COHEN. Secretary Weinberger. You have submitted a supplemental budget for fiscal year 1983 that, as I understand it, includes a list of rescissions to the 1983 appropriations budget as passed by the Congress. I am also told that these rescissions have, in many cases, been applied to programs that were not requested by the Department but were approved by the Congress.

Could you please comment on this strategy that requests additional money for a 1983 budget that we all worked hard to bring within the bounds set by the budget process. Second, would you also comment on why you are offering a set of rescissions designed to irritate the very process and group of people you need on your side if you are to get a defense budget of the size you are seeking.

ANSWER. The $1.6 billion fiscal year 1983 supplemental recognizes a critical need to protect U.S. national security interests and policy objectives. Several key NATO Alliance initiatives were restricted in our fiscal year 1983 appropriations and we would be remiss, both in our commitment to an effective defense program and in our leadership role for a strong NATO Alliance, if we did not take prompt action to correct these fiscal year 1983 restrictive provisions.

NATO initiatives account for a portion of the supplemental request to continue production of the Pershing II missile, to restore the reductions made for the Ground Launched Cruise Missile (GLCM), to provide funds for the prepositioning of materiel in Europe, and to support the U.S. share of costs for Host Nation Support in the Federal Republic of Germany. Language provisions included in the supplemental bill would eliminate restrictions on the purchase of specialty metals and defense equipment from foreign sources, as well as repeal the prohibition of prepositioning materiel in Europe.

We are deeply concerned over Soviet efforts to divide NATO and reduce its capabilities. This supplemental request would deter that Societ objective, and signal our intentions to support the NATO Alliance and our common defense goals.

The balance of the supplemental will provide funds to initiate production of the Peacekeeper missile. This request is required to achieve our initial operational capability goals for this program, and represents a capability to respond to the President's basing mode decision. This program will be discussed in more detail after the Presient's decisions on the recommendations of his Commission.

We also have included language which seeks authority to utilize existing fiscal year 1983 appropriations to proceed with a mulityear procurement proposal for the B-1B aircraft which will ultimately yield a lower program cost for this aircraft.

We believe that $650 million in TOA can be proposed for rescission on fiscal year 1983 appropriations. The details will be provided to the Congress at a later date, but we feel that this further demonstrates our commitment to seek defense savings and efficiencies.

### LEBANON

Senator **Cohen**. Mr. Secretary. I agree with your statements in your Annual Report concerning the importance to our security of naval forces, as well as the importance of readiness and training. Indeed, at this very moment, our naval and marine forces are deployed in Lebanon and off the coast to maintain the fragile cease-fire. I am led to believe that this has caused a dramatic cutback in ship operating hours on the east coast with, I am sure, a concurrent cutback in training in order to fund the increased expenses incurred by this necessary increase in operating tempo in the Eastern Mediterranean.

What have you done, or what do you plan to do, to readjust your distribution of operating funds to compensate for this increase in operating tempo and still permit the Navy to maintain the training and readiness of their U.S. based forces?

**Answer**. A projection of cost to continue U.S. support to the Multinational Forces in Lebanon during fiscal year 1983 is under review now to determine an appropriate funding alternative. The Navy indicates that they have incurred substantial unbudgeted costs for the Navy-Marine Corps team through the first quarter of fiscal year 1983. Short term action to lessen the burden of this unfinanced cost has been to curtail nondeployed fleet operations to permit increased fuel consumption by 6th Fleet. We recognize the need to limit this curtailment since it affects the ability to maintain trained, nondeployed combat units capable of responding immediately to future unforeseen contingencies. Continuance of the current level of naval operations intensity will likely require congressional assistance to approve either a reprograming action or a supplemental budget request.

### LAMPS MK III

Senator **Cohen**. Mr. Weinberger. There is a sense in the Congress that you and your staff are far more lukewarm toward the LAMPS III system than is the Navy.

What is your position on the LAMPS III? What reservations do you have, if any?

**Answer**. There is no divergence of opinion regarding either the effectiveness or the requirement for the LAMPS MK III. The lower production rate set for LAMPS MK III represents a compromise between a higher, more efficient production rate and the rate at which ships become available which require LAMPS MK III. The value of the system is not in question.

### AN/SQR-19

Senator **Cohen**. Mr. Secretary. I have received reports recently of the superb performance of the new SQR-19 towed sonar array.

In view of these reports, how do you justify including this essential system on our list of items for foreign military sales? How do you plan to assure that this system is not compromised?

**Answer**. The reports you have heard are correct. Preliminary data from recent tests indicate that the detection performance of the SQR-19 exceeds our expectations. These results have forced an ongoing reevaluation of this situation. A number of possible options are being evaluated, including the withdrawal of the release for this system.

### RDJTF

Senator **Cohen**. Mr. Secretary. You recently created a new unified command responsible for Southwest Asia that is a direct descendant of the Rapid Deployment

Joint Task Force, and we approved the formation of the command only after a fight on the floor of the Senate. We plan to hold hearings on this subject, and I must say that I still have some major reservations, not with what you have done, but how you did it.

Why did you exclude the entire ocean area of the Indian Ocean? Under whose command would any naval forces come who might be used to support a land force in Oman for instance? What would happen to a Marine force asked to land on the Omani coast? Would it be under the command of CINCPAC until it crossed the high water mark and then be transferred to CINCCENT?

Moreover, a number of important Middle East countries were excluded from the command. Why, and what are your plans for this command in the future? When do you plan to station an element of this command in this area? I feel this area is important enough to merit deploying CINCCENT staff elements to the area now and at sea. Would you please comment?

ANSWER. [Deleted]. The Arabian Sea and Indian Ocean will remain in Pacific Command's area of responsibility. If required, naval commanders would operate in support of USCENTCOM similar to the way other regional unified commanders are supported by naval forces. Marine forces would come under the operational control of CINCCENT upon termination of the amphibious operation which secures a force beachhead similar to the way other regional unified commanders are supported by Marine forces.

### TOMAHAWK SEA-LAUNCHED CRUISE MISSILE (SLCM) SYSTEM

Senator COHEN. Secretary Weinberger. You mentioned in an earlier answer to a question of mine the problems of the Tomahawk cruise missile program. Is the contractor, who was a part of the problem, going to be penalized in some way for their mistakes? If so, how; and what is the procedure invovled?

ANSWER. Yes. It is the Government's intention to fairly and equitably exercise its contract rights to insure that the contractor, General Dynamics-Convair Division, bears the appropriate share of increased costs. The procedures involved in implementing this intent include:

Requiring the contractor to share in costs which exceed the target cost under fixed price incentive contracts.

Requiring the contractor to bear 100 percent of all costs incurred which exceed the ceiling amount of the contract.

Through the Defense Contract Audit Agency (DCAA) and the Defense Contract Administration Service (DCAS), auditing and reviewing all costs incurred under the terms of GD/C contracts to determine their allowability, allocation and reasonableness.

Reduction of fees or target prices, in accordance with the inspection provisions written into applicable contracts, to compensate for delivery of nonconforming products;

It is noted that as a result of problems experienced with the Tomahawk SLCM, the entire program has been restructured in the near term. The emphasis in this case, as in others, will be the fair and equitable application of contractual agreements.

### TAKX BUILD OR CONVERT AND CHARTER

Senator COHEN. Mr. Secretary. Recently an article and an editorial criticizing the Navy's convert and charter program appeared in the local press.

Would you please comment on the viability of this program, especially on the tax treatment referred to by Congressman Pickle. I am also of the impression that because these ships are basically merchant hulls employed in a merchant role and because they will not be involved in direct combat, and that by chartering the services of these vessels and their crews, they can be obtained using merchant marine standards employed by the American Bureau of Shipping and not by using military combat specifications. Thus, the vessels can be obtained for less cost than if they were procured through the Navy's shipbuilding account. Would you please comment on what causes this difference?

ANSWER. The TAKX's ships are vitally needed as part of the military prepositioning program to enhance the rapid deployment of forces. It is in the Government's interest to utilize leasing vice outright purchase since it affords the opportunity for lower cost. Under the TAKX procurement, owners of the ship would be eligible for the normal Accelerated Cost Recovery System (ACRS) deductions and the 10 percent Investment Tax Credit. The statement by the Post's staff writer was completely inaccurate as to the tax benefits available to the owner. The corporations may not buy and sell the tax break's or allowances as they would sell tax losses that they have incurred in their business operations. The Post article which attributes statements to the Congressman Pickle's staff used incorrect comparisons of figures in the Argent report. It did not distinguish between discounted (present value) costs versus actual costs. If the tax rate for the mortgage holders were 10 percent, the analyses used by the Argent group would still indicate that the discounted (present value) cost to the to the Government would be less than the purchase cost.

With respect to the editorial in the Washington Post, which implied that Congress was not kept informed of the leasing plans prior to leasing the contracts, this is simply not true. All the cognizant committees were kept fully informed of the Navy's plans before and during negotiations and written approval from the committee Chairman was obtained prior to award of contracts.

With regard to the relative cost of American Bureau of Ships (ABS) versus military specifications, the ABS requirements would result in lower costs for the ships. The account from which the funds would be obtained has no bearing on the cost. The difference in cost is accounted for by more demanding requirements (military specifications) of the Navy, e.g., compartmentalization, equipment redundancy, shock standards, etc.

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## QUESTIONS SUBMITTED BY SENATOR DAN QUAYLE, TO SECRETARY OF DEFENSE CASPAR WEINBERGER WITH OFFICIAL REPLY BY THE DEPARTMENT OF DEFENSE

### SUPPORT OF NEW WEAPONS

Senator QUAYLE. Are you taking a sufficiently long-range view of the weapon systems investments (the procurement account) approved in prior years and proposed for fiscal year 1984 with respect to the future requirement for Operations and Maintenance (O&M) dollars—spares, maintenance, technicians, war reserves—that will occur when all these new systems come into the inventory? That is, will we be able to afford the readiness dollars in the outyears with the high outlay bulge they create, or to afford them will it require force structure cuts? Put another way, is the balance weighed too heavily in procurement and too lightly in readiness, whereas a more steady growth in procurement would be better.

ANSWER. We believe our estimates of annual operating costs, as provided for in the 5-year program, are representative of the resources required to support major weapon system deliveries. As these estimates are developed, such factors as weapon system delivery schedules, estimated tempo of operations, and reliability and maintainability of features designed into our modern systems are taken into consideration. While all such estimates are subject to refinement as we gain operating experience, they do reflect the most reasonable estimates available at this time. Another consideration is that the magnitude of the procurement program, or the rate at which programs are growing in constant dollar projections, is not necessarily an indicator of the rate of growth one should expect to see in the operating appropriations. For example, while the acquisition costs of complex ships such as nuclear aircraft carriers and submarines are high, the operating costs of these platforms, when compared to conventionally powered ships, are significantly less.

Senator QUAYLE. For the record, please provide the total readiness outlays (by year and by system) which will be required in fiscal years 1984, 1985, 1986, 1987, and 1988 for each of the following systems: B-1, F-14, F-15, F-16, F-18, M-1 tank, Bradley IFV, AH-64 helicopter, Multiple Launch Rocket system, Aegis cruiser, Trident submarine, DDG-51 destroyer, Light Armored Vehicle, and AV-8B.

ANSWER. The data requested is being compiled and will be provided as soon as possible.

### NATIONAL SPACE STRATEGY

Senator QUAYLE. Is there a national space strategy? If so, who is responsible for it; who is articulating it? In your view (from DOD's perspective) what is needed as the follow-on to the space shuttle?

ANSWER. National space strategy is embodied in [deleted] National Space Policy, and is supplemented by Department of Defense Space Policy. The National Space Policy was developed by an interagency group consisting of OSTP (Chairman), State, DOD, Commerce, ACDA, NASA, JCS, and CIA. The DOD policy was developed by all concerned elements of the DOD under the direction of the Deputy Under Secretary of Defense (Policy). Additional space strategy is contained in the DOD Defense Guidance, also under the direction of the DUSO(P).

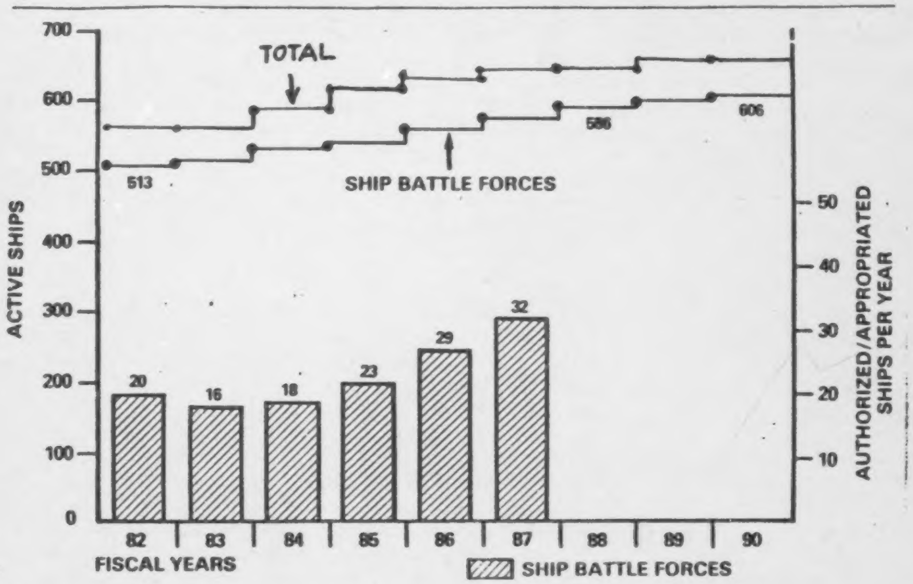
Specific DOD requirements for a next generation manned space vehicle have not been finalized. We believe it should be a fully reuseable vehicle with a rapid turnaround (hours, not weeks) capable of satisfying a variety of military missions.

### 600 SHIP NAVY

Senator QUAYLE. Mr. Secretary, Secretary Lehman has been quoted as proclaiming that it's too late to stop the 600 ship Navy because "we front-loaded the budget." As I look at the Navy procurement account in fiscal year 84 proposed budget, it appears he may be to some degree correct—the budget authority was approved in prior years and now all we wait for is the bills to be paid. Is Secretary Lehman's assertion true, or could the 600 ship Navy still be reduced or at least slowed down? How many of the new ships previously authorized are already under contract?

ANSWER. The following chart graphically depicts the number of ships planned for authorization/appropriation by fiscal year and the planned ship force levels.

GROWTH PROJECTIONS



The majority of the ships authorized each fiscal year are follow on units of approved programs initiated in prior years. The Navy attempts to contract for ship construction or conversion in the year it is authorized. When you consider that it takes approximately three to eight years to construct a U.S. Navy combatant ship, you can see that ships programed in fiscal year 1982 will not impact the ship force levels until fiscal year 1985 or later. You will note that the Navy's ship force level will reach approximately 600 total ships in fiscal year 1985. This includes approximately 530 combatants. Of course you realize that the force level is dependent on how fast the other ships are inactivated as well as the rate at which new ships enter the fleet. Hence, there are enough ships already authorized and for which funds are appropriated to reach the total ship force level of 600 but not the more critical combatant ship force level. The latter will not be reached until 1990. This is what Secretary Lehman meant by being too late to stop the 600 ship Navy. Also, it is evident that the numbers of ships planned for the out years are greater than the number programed for acquisition in the current years. The program is structured to allow for a gradual buildup in manpower and facilities to accommodate the shipbuilding requirements.

### RECRUITING REQUIREMENTS

Senator **Quayle**. The fiscal year 1984 budget proposes an increase in military manpower of some 37,000 and your annual report talks of an increase by fiscal year 1988 of some 200,000. How do you propose to meet these added recruiting requirements from volunteers, especially when you propose a pay freeze for fiscal year 1984 and face a decreasing young male population?

**Answer**. The deletion of the annual pay raise in fiscal year 1984 was not an easy decision. We realize there will be some adverse impact on recruiting and retention. We have sized our recruiting budget request to take into account this deletion and the decline in youth (12 percent between 1983 and the 1986 low point), and we believe military manpower requirements can be met. A combination of factors are important. First, the Nation has rallied behind the President, and we believe the resulting increased awareness and appreciation on the part of the American people for our young men and women in uniform will continue. Second, with the strong backing of the President, and with the help of the Congress, we reversed the course of earlier downtrends through more competitive compensation and increased reenlistment and recruiting resources. Despite the effect of the deletion of the pay raise this year, by approving the manpower related programs in our budget, these positive trends will continue. Third, there has been a recessionary economy. It is hard to tell exactly how much each factor has contributed, but the net result of all the factors is increased retention which decreases the need for recruits. Fourth, we have made it clear to military personnel that we plan to provide for the recovery of the pay raise cap in fiscal year 1985. As the economy improves, with continued strong support of the American people and congressional approval of the compensation, recruiting and retention requests in the budget, we expect continued success. However, it will be a difficult job and we need your full support of our budgeted recruiting and manpower related programs.

### REQUIREMENTS FOR F-14 AIRCRAFT

Senator **Quayle**. One of the principal reasons for having F-14s on board carriers (a plan of 2 squadrons per carrier) is to provide defense for the fleet—including having F-14s fly CAP on a 24-hour a day basis. With a combination of something like the TR-1 reconnaissance aircraft and the DSCS satellite system, couldn't the CAP requirement be eliminated and the need for F-14s thus greatly reduced?

**Answer**. The F-14 aircraft are assigned Combat Air Patrol (CAP) in conjunction with organic Carrier Battle Group (CVBG) reconnaissance assets, the E-2C, and together form the outer layer of the CVBG's layered AAW defense. [Deleted.]

The requirement for CAP does not determine the number of fighters and reconnaissance aircraft aboard the CV; the numbers are determined by the force levels deemed necessary to counter the expected air threat, while balancing that capability with the CV's capability to perform power projection, ASW, and the multiple other mission requirements.

### 9MM HANDGUN

Senator **Quayle**. There seems to be an inexplicable delay in the Army's issuing a new RFP for the procurement of the 9mm handgun, much needed by all the military services to replace the .45 caliber handgun. Can you explain why none has been issued and when the Army will?

**Answer**. The delay you speak of is addressed in the DepSecDef letter of December 28, 1982, to Congressman Boland. A copy of this letter and the DepSecDef's December 28, 1982, memorandum to the Military Departments are provided for the record (see attached). We reaffirm his decision that the Army proceed expeditiously with testing, and with source selection and contract award using Coast Guard funds to meet the Coast Guard need for the 9mm handgun by the end of the first quarter of 1984. Funds have been included for each Service for procurement of 9mm handguns and ammunition in fiscal year 1984. What we now need is for Congress to authorize and appropriate these funds so that procurement can begin for the Military Departments. The Army will issue a new RFP soon and follow a schedule leading to contract award by first quarter fiscal year 1984.

THE DEPUTY SECRETARY OF DEFENSE,
*Washington, D.C., December 28, 1982.*

Hon. EDWARD P. BOLAND,
*House of Representatives,*
*Washington, D.C.*

DEAR CONGRESSMAN: On 30 June 1982, I asked the Secretaries of the Military Departments to submit the Joint Service Operational Requirement (JSOR) and an acquisition plan for the 9mm handgun. I also directed the Army to expedite the procurement process to meet the urgent Coast Guard need using the Coast Guard's fiscal year 1982 funds and directed the Military Departments to budget for required quantities in fiscal year 1984 and beyond.

The JSOR has been approved, paving the way for submission and approval of the acquisition plan. The Army expressed concern about proceeding with the 9mm program because of the fiscal year 1983 DOD Authorization Act and Conference Report language. Additional language in the Conference Report, however, indicates an intent that the Army not be precluded from the procurement of handguns for the Department of Transportation (Coast Guard) requirements. Public Law 97-114 of 29 December 1981 did provide fiscal year 1982 funds and stated that ". . . . $1,900,000 shall be available only for the continued testing and evaluation of 9mm handguns without delay, to remain available for obligation until September 30, 1984." Based on this, Dr. Wade requested on 7 October 1982 that the Under Secretary of the Army prepare a competitive acquisition plan to select a standard 9mm handgun.

Because of the early Coast Guard need and refurbishment requirements in some Service handguns, I have decided to proceed with the acquisition of 9mm handgun. The DOD will use the $1.9 million in fiscal year 1982 funds to conduct competitive Joint Service tests with members of the uniformed Services participating in both planning and execution. A source selection decision will be made and initial procurement will be initiated using Coast Guard funds to meet Coast Guard needs. Future Service participation will depend on funding availability.

If there is anything further that I can do to assist, please let me know. Thank you again for your interest and continuing support of our programs.

Sincerely,

FRANK C. CARLUCCI.

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THE DEPUTY SECRETARY OF DEFENSE,
*Washington, D.C., December 28, 1982.*

### MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS

Subject: 9mm handgun acquisition plan.

I wish to reaffirm my decision of 20 June 1982 to initiate the procurement process to obtain the standard 9mm handgun to meet the early Coast Guard need. The Army, as the Executive Agent, will proceed expeditiously with the testing, and with source selection and contract award using Coast Guard funds to meet the Coast Guard need for the 9mm handgun by the end of the first quarter of 1984. The initial procurement will validate the technical data package (TDP) to permit qualification of a second competitive source, if procurement rates make this possible. Service participation will depend on funding availability.

FRANK C. CARLUCCI.

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### PRODUCTION RATE STRETCHOUT

Senator QUAYLE. Mr. Secretary, I would like to know the cost impact per unit of stretching out the production rate, as compared to that proposed in the fiscal year 1984 budget, of the following weapon systems: B-1, C-5, MX, F-15, F-16, M-1 tank, Bradley IFV, AH-64, MLRS, Patriot missile, Light Armored Vehicle, Trident submarine, Nuclear Attack Submarine, Aegis cruiser, AV-8B, F-14, F-18, and the Harpoon, Phoenix and Tomahawk missiles. Please provide the cost per unit impact at various levels—a modest change in the rate up to a drastic reduction in the production rate.

ANSWER. I support the needs of the committee for adequate data to examine alternatives to our budget proposal. However, you may not be aware of the sizeable workload, involving both in-house and contractor effort, required for proper pricing of multiple production rates for 20 major weapons systems. I would prefer to respond to a specific adjustment to a specific program at such time as the committee is seriously considering such an adjustment. In the interim, we will be delivering to the committee a specially constructed and congressional staff requested procurement back-up book. This book will contain a detailed costing exhibit which should permit the committee to examine options of the type described.

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## Questions Submitted by Senator Henry M. Jackson, to Secretary of Defense Caspar Weinberger With Official Reply by the Department of Defense

### DEPARTMENT OF DEFENSE USE OF POLYGRAPHS

Senator Jackson. Mr. Secretary, I have read with some concern reported plans for expanded DOD use of polygraphs. I understand the existing Department directive is being revised to permit this expanded use.

What is the status of this revision to the Department's directive?

How many more people will be subjected to polygraphs if the expanded directive is implemented?

Will more polygraphers have to be retained by DOD? How many and at what annual cost?

Will the Armed Services Committee have an opportunity to review the draft directive before it is issued?

Answer. The proposed revisions to the polygraph directive, Department of Defense Directive 5210.48, are still under review at the staff level. I will review the results of this effort when completed to make a decision.

The primary group of people who would be effected if the proposed polygraph revision is approved would be those who have access to our most sensitive classified information, including Sensitive Compartmented Information (SIC). It is estimated that approximately 23,000 persons would fall under the provisions of the proposed directive. While this is not an insignificant number, it does represent a relatively small percentage of the approximate 3 million personnel in the Department of Defense.

To fully implement the provisions of the proposed revision, it is anticipated that 138 additional polygraph examiners would be required. Given the limited capacity of our polygraph examiner training facilities, these examiners will have to be phased in over the next 3-4 years. Consequently, it is not really possible to arrive at an annual cost at this time. However, it is known that the approximate cost to train a polygraph examiner is $6,000 and that the average grade and salary of DOD polygraph examiners is GS-12, step 4, $32,311.00, which provides some idea of the cost involved.

Copies of our proposed revised polygraph policy have been provided to members of your staff for review and comment by the Armed Services Committee.

### WEAPON SYSTEM COST ESTIMATING

Senator Jackson. Secretary Weinberger, a recent article in The National Journal ("Pentagon Cost Overruns, A Venerable Tradition, Survive Reagan's 'Reforms.", January 8, 1983, pp. 56-60) bemoaned the problems that the Department of Defense has in accurately estimating the costs of major weapons systems. What are these estimating difficulties? What are you planning to do to help make cost estimating procedures more accurate?

Answer. Michael Gordon's Article "Pentagon Cost Overruns, a Venerable Tradition, Survive Reagan's 'Reforms'" in the January 7, 1983 National Journal cites contractor buy ins and sole source procurements, program manager excessively optimistic estimates for new weapon system costs, delays of needed funding to the out-years, OSD's failure to adequately review Service estimates, and also the reluctance to cancel programs when faced with budget cutbacks. Mr. Gordon's analysis is in my view a reasonably accurate representation of past history. However, he ignores the vigorous steps this administration has taken to deal with each of these problems; steps that are beginning to bear fruit. The foremost of these has been our "budget to most likely cost" initiative which we have emphasized at all levels in the services and within OSD. More emphasis has been placed on the use of independent cost estimates. Their use has been introduced into the Planning, Programing and Budgeting process. They have been used in budget preparation. The OSD Cost Analysis Improvement Groups estimate of costs has been the basis for restructuring the funding of a number of programs. We have also pressed for more competition at all levels in the procurement process, setting up second sources on a number of major programs. Under our efficient production rate initiative we have increased annual buy sizes and cut unit costs on such programs as the F-16, F-15, and F-14. We have also begun to cancel programs in the face of limited funds; almost 50 were terminated in fiscal year 1983 alone. We are attempting to deal decisively with a long-entrenched and difficult problem. We believe that the words of this problem is coming under control. I think you will see some results of our efforts in the diminished growth in the December 1982 SARs, currently being delivered to the Congress.

### COMBAT READINESS OF RESERVES

Senator **Jackson**. Secretary Weinberger, what are the trends in terms of combat readiness of the Reserve forces? Where are these forces particularly strong and where has the most improvement occurred over the last several years?

**Answer**. Overall Reserve Component readiness has improved since 1 January 1981. On 1 January 1983, [deleted] of the force was either fully or substantially combat ready compared to [deleted] on 1 January 1981.

The significant progress in improving Reserve Component readiness is the result of personnel strength and equipment posture improvements. The Selected Reserve is currently at its highest strength since 1962. During fiscal year 1982, the Reserve Component enlisted 104 percent of its annual budget objective. It is anticipated that by continuing current incentive programs and increasing efforts to combat attrition, additional strength improvements can be expected.

The equipment posture of the reserves is being upgraded through modernization programs, redistribution of assets from active to Reserve units to replace older and obsolete equipment, and new procurement. Recent initiatives to improve the military capability of the Reserve Component includes; modifying the AH1G attack helicopter; upgrading M60A1 tanks; transferring FFG-7 class frigates from the active force to the Reserves; modernizing mine countermeasure ships; and transitioning a A-7B aircraft squadron to F/A-18 aircraft.

Despite the aforementioned progress, there remains much to be done to raise the level of Reserve Component readiness. Constrained resources inhibit, and will continue to do so, the Services' ability to reduce equipment shortfalls and improve equipment compatibility with the active force. Equipment programed for procurement in fiscal year 1984 includes the Bradley Fighting Vehicle, C-12 aircraft, 155mm howitzers, individual crew-served weapons, chemical warfare defense equipment, and support equipment such as trucks, generators, deicing units, and firefighting equipment.

### POSSIBLE EXPANDED ROLE FOR THE RESERVES

Senator **Jackson**. Mr. Secretary, in light of the current status of the Reserve forces and trends in their combat readiness, are there areas where the Reserve forces can play an expanded role within overall force-structure levels?

**Answer**. Yes, but only at the risk of a loss in force readiness and substantial personnel turbulence. Furthermore, any increase in the Guard and Reserve should be well planned and accomplished over a long term transition period. No areas for an expanded Reserve role can be considered until at least the following practical questions have been answered:

Can the number of people with skills required be recruited in one location to form a Guard or Reserve unit?

Are available facilities located where the people can be recruited and trained?

How long will it take to get the unit ready?

Will other units in the region suffer recruiting and retention problems if a new unit is formed?

What will be the impact on the already strained rotation base and on the viability of the AVF, if overseas tours and sea duty are extended?

Would a major, rapid shift of roles to the Reserve forces be perceived as a lessening of military deterrence?

### REVIEW OF MISSIONS WHICH COULD BE ASSIGNED TO THE RESERVES

Senator **Jackson**. Mr. Secretary, in 1974 the Defense Department announced the Total Force Policy and clearly outlined the country's reliance on Reserve forces to augment the active forces in time of emergency.

Since 1974, when policy was adopted, has there been a thorough, systematic review by the office of the Secretary of Defense or by the JCS of missions across all of the active services that could be transferred to the Reserve forces?

Do you think such a review would be useful?

**Answer**. There have been no special studies dedicated to this specific question. The question of missions to be performed by the Defense Department and the resources (manpower, money and equipment) needed to discharge them is addressed annually in great detail by the Planning, Programming and Budgeting System (PPBS). The specific procedures established by that system ensure that both the assignment of missions to the Reserve Components and allocation of the resources required to perform those missions are consistent, appropriate, and efficient. Allocation of missions to the Reserve Components must be done in the context of the overall defense mission and management of defense resources. In view of the interest expressed by the Congress in this topic, the Department is undertaking a thorough review of all mission assignments.

### CANCELLATION/REDUCTION OF MARGINAL PROGRAMS

Senator Jackson. On page 13 of your prepared statement you state, "since we took office over 100 marginal weapons or equipment programs have been eliminated, reduced, or merged." Please provide the committee with three lists: a list of such programs which were eliminated; a list of such programs which were reduced, along with a discussion of how much they were reduced in dollar and quantity amount in comparison to some previously established base; and a list of such programs which were merged, along with a discussion of those related programs with which the merger was accomplished.

Answer. The specific exhibit entitled "Cancellation or Reduction of Marginal Programs" is part of a package on Economies and Efficiencies which is now in final internal review and will be issued shortly. All of the lists requested will be provided at that time.

Senator Jackson. Assuming peacetime conditions, please provide a lengthy representative listing of the expected active duty utilization lifetime (including attrition due to accidents) of combat vehicles including such items as jeeps, tanks, artillery pieces, missiles, tactical fighters, strategic bombers, etc.? What further utilization lifetimes are expected for reserve and national guard units to operate such equipment items?

Answer. Combat vehicle expected active duty and Reserve/National Guard utilization lifetimes are provided by owning Service.

For the Army: Under the current total Army concept, there is no differentiation between Reserve/National Guard units and the Active Component with respect to expected utilization lifetimes. Equipment distribution is based on a "first-to-fight" priority system with Reserve/National Guard units receiving equal consideration with Active Army units.

Current Useful Lives for tactical/combat vehicles are shown below. Useful Life is the preferred term: that period of time, in years (or mileage) from acquisition and continuing until the vehicles reach their economic life or that point where they are unable to satisfy some other criterion (such as their required mission).

*Current useful lives for tactical/combat vehicles (includes accident attrition)*

| Vehicle: | *Useful life* |
|---|---|
| ¼-ton "Jeep" | 12 yr or 72,000 mi.[1] |
| 5/4-ton (M880) truck | 7 yr.[1] |
| 5/4-ton (M561) truck | 12 yr.[1] |
| 2½-ton truck | 12 yr. or 60,000 mi.[1] |
| 5-ton truck | 20 yr. or 60,000 mi.[1] |
| Armored personnel carriers | 30-plus years.[2] |
| Tanks | 30-plus years.[2] |

*Current useful lives for artillery pieces and missiles*

| Artillery piece: | |
|---|---|
| M101A1, 105mm towed howitzer | 30-plus years.[3] |
| M198 155mm towed howitzer | 30-plus years.[3] |
| M110A2 8" SP howitzer | 20 yr.[3] |
| M109A2/3 155mm SP howitzer | 20 yr.[3] |
| Vulcan AA gun | 20-plus years.[4] |
| Duster AA gun | 30-plus years.[5] |
| Missiles: | |
| Dragon | 20 yr. |
| Tow | 20 yr. |
| Pershing | 20 yr. |
| MLRS | 20 yr. |

### *Current useful lives for artillery pieces and missiles*—Continued

| Missiles (continued): | *Useful life* |
|---|---|
| Roland | 17 yr.[6] |
| Chaparral | 20 yr.[7] |
| Red Eye/Stinger | 20 yr. |

[1] Useful life for tactical vehicles was based on the Army Equipment Records Systems data and exceeded the vehicle design lives. The Army is currently conducting a program to reassess the useful lives of tactical vehicles. A copy of the Tactical Wheeled Vehicles (TWV) Useful Life Determination Program Executive Summary previously provided to the Chairman of the House and Senate Appropriations and Armed Services Committees is enclosed. (Retained in Committee files.)

[2] Armored Personnel Carriers (APC) and Tanks have useful lives limited only by attrition and design obsolescence/threat change. The current M113-Series APCs and M60-Series tanks have been in service since the early 1960's and will continue through the 1990's. These vehicles are cyclicly overhauled based on a Combat Vehicle Evaluation program where candidate vehicles are inspected at approximately 5,000-mile intervals (or sooner if the vehicle is incurring excessive maintenance) and a technical evaluation is made to overhaul or continue in service.

[3] Artillery pieces, like combat vehicles, have useful lives limited only by obsolescence and threat changes. They are subjected to cyclic overhaul and are washed out only after depot level inspection determines the weapon is beyond overhaul. For example, the M101A1 howitzer has been in the inventory since WW II and there is no planned phaseout date.

[4] Vulcan AA Gun is currently only in Active Army, but it is scheduled to be phased into ARNG starting in fiscal year 1986. A portion of the Vulcans will be displaced by the Sgt. York. However, there will be Vulcan guns in both Active Army and ARNG until replaced by a new Light Air Defense System (LADS) which has not yet been developed.

[5] Duster, M42A1, AA Gun is currently only in ARNG. It is scheduled to be phased out and replaced by Vulcan starting in fiscal year 1986 and completed in fiscal year 1989. The Duster was first fielded in 1954.

[6] Roland will be issued only to ARNG and will be supported at least through fiscal year 2000.

[7] I-Chaparral is currently only in Active Army, but is scheduled for delivery to ARNG beginning in fiscal year 1984. It will also remain with Active Army for an undetermined period of time.

For the Navy: The representative active duty utilization lifetimes of combat equipment by generic type are shown below:

(1) Aircraft carriers—30 years, with possible 15-year life extenision.

(2) All other surface ships—30 years.

(3) Submarines (stratetic and attack)—30 years.

(4) Aircraft (including helicopters)—6 to 8 thousand flying hours which approximates 15 years.

(5) Tactical missiles—3 to 5 years shelf life, however, at the end of such period the missile is subjected to thorough testing at which time defective components are reworked and/or upgraded. Active duty utilization period would depend upon state-of-the-art obsolescence.

(6) Strategic missiles—service life in the case of Trident I is 10 years and the goal for Trident II is 20 years. At the end of these periods, the missile is evaluated for an extension of service life.

The Navy has no policy of add-on lifetime utilization by Reserve units. Under the Navy's Total Force Concept, and depending upon the success of the Navy procurement program, Reserve units operate the above representative equipments at different points within their lifecycle.

For the Air Force: The following information concerns Air Force combat vehicle utilization lifetimes. Aircraft data is a total inventory projection (Active, Reserve, Guard forces). The missile systems presented are currently assigned to Active forces only.

## AIRFRAME DESIGN LIFE

|  | Original design life (flying hours) | Currently certified to (flying hours) | Current average age (hours/years) |
|---|---|---|---|
| Aircraft type: |  |  |  |
| F-4 | (1) | 8,000 | 3,541/13.3 |
| F-5 | 4,000 | 4,000 | 1,522/6.0 |
| A-7 | 4,000 | 4,000 | 2,236/8.6 |
| A-10 | 6,000 | 8,000 | 765/2.0 |
| F-15 | 4,000 | 8,000 | 739/3.1 |
| F-16 | 8,000 | 8,000 | 245/1.1 |
| F-111 | 4,000 | 4,000 | 2,135/10.3 |
| F-106 | 4,000 | 8,000 | 5,343/21.7 |

## AIRFRAME DESIGN LIFE—Continued

| | Original design life (flying hours) | Currently certified to (flying hours) | Current average age (hours/years) |
|---|---|---|---|
| C-5 | 30,000 | | 7,404/12 |
| C-130A | (1) | | 12,000/26 |
| B-52 | (1) | | 10,644/22 |
| KC-135 | 10,000 | | 9,301/23 |

[1] Designed prior to use of lifetime criteria.

### AIR FORCE MISSILE DATA

*Titan II*—IOC for Titan II was 1963. Deactivation of this system is in progress with 47 missiles remaining. The current deactivation schedule removes missiles from alert at the rate of one approximately every six weeks through first wing deactivation completion in September 1984. The schedule accelerates to the rate of one missile removed every month for the remaining two wings with program completion scheduled for September 1987.

*Minuteman*—IOC for Minuteman II was 1965 and for Minuteman III was 1970. The ground system for both missiles also supported Minuteman I and was operational in 1962. Currently, the 1,000 missiles of this system are expected to remain in the inventory through the year 2000 and logistics support is prepared to maintain the system for at least that time frame. No system deactivation date has been established. No attrition due to accidents is expected.

*The Ground Launched Cruise Missile (GLCM)* will be deployed with an IOC of December 1983 with a design life of at least 15 years. No attrition due to accidents is expected.

For the Marine Corps: The following listing of active duty and Reserve utilization of combat items is provided:

| Nomenclature | Expected use [1] | |
|---|---|---|
| | Active | Reserve |
| Truck, AMB, ¼T, M718A1 | 144 | 209 |
| Truck, AMB, 1¼T, M886 | 84 | 122 |
| Truck, cargo, 5T, M54A2C | | 240 |
| Truck, cargo, 5T, M923 | 168 | |
| Truck, cargo, M55A2 | | 240 |
| Extra long wheel base truck, cargo, M928 | 72 | |
| Truck, ½T, M274A2C | 120 | 174 |
| Truck, ¼T, M151A2 | 144 | 209 |
| Howitzer, med. sp., 155MM, M109A1 | 60 | 87 |
| Howitzer, heavy sp., 8", M110A1 | 60 | 87 |
| Landing vehicle, tracked, LVTP7 | 72 | 104 |
| Tank, combat, 105MM gun, M60A1 | 30 | 44 |

[1] Number of months of use between depot level rebuilding.

### SERVICE LIFE—MAJOR SOVIET EQUIPMENT

Senator JACKSON. What are our best estimates of comparable utilization lifetimes for Russian made equipment in active-duty and reserve units during peacetime?

ANSWER. [Deleted.]

*Naval ships:* An estimate of the expected service life of Soviet Navy surface combatants and submarines is, of necessity, based on a limited number of samples in the post World War II era, and the nature of ships which undergo periodic extensive overhauls. Recognizing that such units in the Soviet Navy vary in size and complexity from small torpedo boats to aircraft carriers, we believe about 30 years is a typical life expectancy, though some ships and submarines built in the early 1950s remain in active service and others have been placed in reserve status with no known established hull-life limit.

There is no consistent pattern of ship construction, followed in sequence by active service in the Soviet Navy, then foreign sale, scrapping, or placement in reserve status. Several types of surface combatants and at least one submarine class are constructed for immediate export as new units. Soviet Navy ships and submarines are routinely placed in reserve status for extended periods, only to be reactivated to serve in the active fleet for prolonged periods. More than hull life, which in many cases could significantly exceed 30 years, the service life of Soviet Navy ships appears to be driven largely by evolving technology, and the questionable costs of repeated upgrades of main weapon systems and sensors. With a continuing introduction of numerous classes of warships and submarines, manpower limitations on availability of crews also impacts on service life for older units.

[Deleted.]

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## QUESTIONS SUBMITTED BY SENATOR JOHN C. STENNIS, TO SECRETARY OF DEFENSE CASPAR WEINBERGER WITH OFFICIAL REPLY BY THE DEPARTMENT OF DEFENSE

### BUDGET FOR GUARD AND RESERVE FORCES FOR FISCAL YEAR 1981—FISCAL YEAR 1985

Senator STENNIS. Mr. Secretary, would you provide for the record the total budget for Guard and Reserve forces for fiscal year 1981 through fiscal year 1985? In addition, please break this total amount down by the various appropriation accounts (Procurement, O&M, et cetera) as well as by Reserve Components.

ANSWER. The following information was obtained from the Five Year Defense Program with the exception of U.S. Army procurement for fiscal year 1984 and fiscal year 1985 which was provided by the service. This includes all personnel, operations and maintenance, construction and procurement costs specifically associated with the Guard and Reserve program.

GUARD AND RESERVE BUDGETS

[Dollars in millions]

| | ARNG | USAR | USNR | USMCR | ANG | USAFR |
|---|---|---|---|---|---|---|
| 1981 (actual): | | | | | | |
| Reserve personnel | 1,175.6 | 817.6 | 290.8 | 115.0 | 387.2 | 246.4 |
| Operations and maintenance | 951.4 | 523.0 | 552.5 | 28.9 | 1,542.0 | 604.9 |
| Military construction | 42.3 | 46.9 | 33.0 | ([1]) | 89.7 | 21.6 |
| Procurement | ([2]) | 1,235.4 | 122.2 | 12.3 | ([2]) | 642.9 |
| Total 1981 | 2,169.3 | 2,622.9 | 998.5 | 156.2 | 2,018.9 | 1,515.8 |
| 1982 (actual): | | | | | | |
| Reserve personnel | 1,511.1 | 1,005.6 | 344.1 | 144.0 | 478.1 | 292.7 |
| Operations and maintenance | 1,105.0 | 665.8 | 561.3 | 40.0 | 1,668.8 | 675.6 |
| Military construction | 67.7 | 65.2 | 36.0 | ([1]) | 105.1 | 37.4 |
| Procurement | ([2]) | 283.4 | 347.9 | 48.7 | ([2]) | 327.9 |
| Total 1982 | 2,683.8 | 2,020.0 | 1,289.3 | 232.7 | 2,252.0 | 1,333.6 |
| 1983 (estimated): | | | | | | |
| Reserve personnel | 1,698.8 | 1,169.4 | 611.9 | 162.7 | 548.4 | 324.6 |
| Operations and maintenance | 119.2 | 705.1 | 637.5 | 51.1 | 1,822.1 | 765.0 |
| Military construction | 55.0 | 41.8 | 25.2 | ([1]) | 127.9 | 35.6 |
| Procurement | ([2]) | 53.3 | 298.8 | 79.2 | ([2]) | 580.8 |
| Total 1983 | 1,873.0 | 1,969.6 | 1,573.4 | 293.0 | 2,498.4 | 1,706.0 |
| 1984 (estimated): | | | | | | |
| Reserve personnel | 1,914.8 | 1,229.0 | 685.5 | 168.9 | 593.0 | 342.8 |
| Operations and maintenance | 1,135.0 | 662.8 | 693.0 | 53.6 | 1,824.7 | 815.0 |
| Military construction | 55.3 | 52.7 | 24.8 | ([1]) | 79.9 | 42.2 |
| Procurement | ([2]) | 900.0 | 211.3 | 45.6 | ([2]) | 505.8 |
| Total 1984 | 3,105.1 | 2,914.5 | 1,614.6 | 268.1 | 2,497.6 | 1,705.8 |
| 1985 (estimated): | | | | | | |
| Reserve personnel | 2,046.8 | 1,462.2 | 754.3 | 181.6 | 642.3 | 364.5 |
| Operations and maintenance | 1,358.9 | 709.3 | 747.3 | 58.2 | 1,862.0 | 876.8 |
| Military construction | 91.6 | 94.8 | 28.9 | ([1]) | 105.6 | 39.7 |
| Procurement | ([2]) | 900.0 | 213.5 | 77.6 | ([2]) | 548.7 |
| Total 1985 | 3,497.3 | 3,166.3 | 1,744.0 | 317.4 | 2,609.9 | 1,829.7 |

[1] Included as part of USNR Milcon.

[2] Army Guard and Reserve and Air Guard and Reserve taken together.

## Questions Submitted by Senator Sam Nunn, to Secretary of Defense Caspar Weinberger With Official Reply by the Department of Defense

### DEFENSE DEFLATION

Senator Nunn. Secretary Weinberger, last year DOD finally convinced OMB that DOD procurement for aircraft, missiles, weapons and ships should have an inflation rate different than the rest of the budget. You testified that approximately $2.1 billion in fiscal year 1983 TOA was requested for these more realistic rates. Are you doing the same this year and how much of the TOA request and outlay estimate is needed for this?

Answer. In fiscal year 1984 our inflation rate for aircraft, missiles, weapons, and ships is again larger than the general purchases rate used in the rest of the budget. By using these more realistic inflation rates, our fiscal year 1984 budget contains almost $1.0 billion more than would have been requested if these rates were not used. We feel that the use of higher rates for these accounts is justified based on the historical inflation differential that is reflected by the Bureau of Economic Analysis DOD deflator.

Senator Nunn. Mr. Secretary, the Congress failed to approve the administration's request last year for production of binary chemical weapons. What is your program this year for retaliatory chemical weapons and how important is this for deterrence?

Answer. The acquisition and maintenance of a small but militarily useful chemical weapons stockpile is necessary to deter the use of chemical weapons against us and our allies. The premise for deterrence is that chemical weapons exert their maximum influence on the conduct and outcome of a conflict when a significant imbalance exists between the two sides. If one side can employ chemical weapons to force the other to operate in a cumbersome protective posture while its forces can operate normally, without fear of effective retaliation, the results can be decisive. On the other hand, a potential user would see little gain from using chemical weapons if his forces would also have to assume the burden of operating in a protective posture. Thus, chemical use can be deterred by the prospect that retaliation would deny a significant advantage from such use.

During last year's debate over chemical weapons procurement, we believe there were major areas of agreement between proponents and oponents. These were:

An aversion to chemical weapons, as common within the military as without.

A genuine desire for a complete and verifiable ban on chemical weapons as the preferred solution to eliminate the threat of chemical warfare.

Recognition of the Soviet Union's formidable capability to wage chemical warfare and the need to deter them from using this capability.

Little or no desire to invoke the threat of nuclear response to deter chemical warfare.

Support of a program to improve U.S. defensive capabilities to include more and better training and new equipment.

Acknowledgement that defensive measures alone are insufficient to deny a military advantage to an aggressor and, therefore, some retaliatory capability is required to deter.

Support of continuing the existing U.S. policy of absolutely no biological or toxin weapons and chemical weapons only for retaliation.

The major area of disagreement was over whether the present U.S. chemical weapons stockpile was adequate for this deterrent role. It is the position of the administration that it is not.

The most critical deficiency in the chemical stockpile is the lack of a capability to deliver persistent agent against targets beyond artillery range. Thus, we are faced with a situation where the Soviets can attack, contaminate, and severely degrade our airfields, logistics modes, command and control facilities, and ports, while we have no capability to impose similar restrictions on them. The Bigeye bomb is designed to redress this deficiency, and the need for it is clear. However, during the debate the Bigeye was criticized (albeit without any supporting evidence) as being unreliable. We in the Department believe that a deep attack persistent agent capability is critically important. We also believe that a decision on the Bigeye should be based on the best information available, not on unsubstantiated opinion. Consequently, we have formed a panel of outside experts to review the technical and management aspects of the program and provide their recommendations. We expect to have initial results in the early spring, in time to provide a more factual basis for debate on the Bigeye.

For procurement of new artillery shells, the need is not one of redressing a clear lack of military capability. The U.S. possess a stockpile of chemical nerve agent artillery shells, similar to the proposed M-687 binary round, that are compatible with modern 155mm and 8-inch artillery pieces. The quantity is in the range of sufficiency (at least for U.S. forces) and actually is higher than the planned acquisition quantity for the binary projectile. The current mix of agent may not be ideal (a high percentage of persistent VX versus the nonpersistent GB in the new shell), and there are numerous operational, logistical, and safety advantages to the M-687 binary projectile as opposed to the existing items. However, these factors, in and of themselves, might not be sufficient to justify the expense of replacing the stockpile.

The significant questions regarding chemical artillery shells are how long will the existing shells remain usable and are they now (and will they remain) safe to fire? The newest of the shells was filled in 1967 and the oldest in 1955. The chemical fills are unstable compounds which deteriorate over time. Sampling has shown that the fill has degraded, although the 155mm and 8-inch fills still meet acceptable standards. The degradation reaction is self-catalyzing in that the degradation byproducts foster the breakdown of the agent. Stabilizers were added to the agent during filling, but when they are consumed the degradation rate will accelerate. More significantly the degradation byproducts are corrosives and have been in contact with the internal shell surfaces. If the internal structure of the shells has been weakened, it may be unsafe to fire them, and there has been no stockpile confidence test firing since 1969. The questions of the present and future usability of the artillery stockpile are critical. They also should be amenable to scientific analysis allowing informed judgments to be made on the basis of solid evidence. To address these questions, we have assembled a highly qualified panel of experts on chemistry, corrosion, and explosives to assess the evidence and provide their judgments and recommendations. Again, we expect to have the results in time to allow a more informed debate of binary artillery projectile procurement.

In summary, a modest chemical weapons stockpile, in combination with a chemical protective capability, is essential to deter chemical use against U.S. forces. There is a clear stockpile deficiency in the lack of a deep target persistent agent capability which can be redressed by Bigeye, and there is a strong possibility that our chemical artillery stocks will be ineffective or unsafe to use in the late 1980's and the 1990's. Therefore, prudence dictates that we press ahead with acquiring the capabilities to produce chemical weapons and with requesting funds for initial production.

Regarding fiscal year 1984 funds for the retaliatory portion of the chemical deterrence program, we are requesting $194 million ($29M for RDT&E, $97M for procurement of a production capability, $61M for procurement of munitions, and $7M for maintenance of the existing stockpile). We are also requesting $691 million for chemical/biological protection and $76 million for demilitarization of obsolete or unserviceable chemical munitions.

### STATUS OF ENHANCED RADIATION WARHEADS

Senator NUNN. What is the status of the enhanced radiation warhead in the fiscal year 1984 budget and the FYDP? What has occurred since fiscal year 1983 and what is the status of the special nuclear material production and warhead components?

ANSWER. [Deleted] current nuclear weapons programs which involve enhanced radiation warheads: The W70-3 Lance, W79-1 8-inch howitzer, [deleted]. The Lance and 8-inch warheads are currently in production; Lance production will be completed in [deleted] while 8-inch production will continue through [deleted].

The following table shows Department of Defense costs for R&D and procurement of enhanced radiation weapons. Costs are actual dollars, taking expected inflation into account. Operations and maintenance costs are not included, since the weapons systems are dual-capable. Costs are in millions of dollars.

| Warhead | Fiscal year | | | | |
|---|---|---|---|---|---|
| | 1984 | 1985 | 1986 | 1987 | 1988 |
| W70-3 Lance | (1) | (1) | (1) | (1) | (1) |
| W79-1 8-inch howitzer: | | | | | |
| R&D | 0 | 0 | 0 | 0 | 0 |

| Warhead | Fiscal year | | | | |
|---|---|---|---|---|---|
| | 1984 | 1985 | 1986 | 1987 | 1988 |
| Procurement | 29.1 | 6.5 | 0 | 0 | 0 |
| Total | 29.1 | 6.5 | 0 | 0 | 0 |
| [Deleted]: | | | | | |
| R&D | [Deleted] | | | | |
| Procurement | [Deleted] | | | | |
| Total | | | | | |

[1] No remaining DOD costs.

The President decided on August 6, 1981, to produce the Lance and 8-inch warheads in a fully assembled enhanced radiation configuration. The Department of Energy has planned for sufficient special nuclear material and warhead components to manufacture fully assembled rounds.

[Deleted.]

### STRATEGIC PROGRAMS

Senator NUNN. Secretary Weinberger, in October 1981, you testified that the 5-year constant dollar costs of the overall strategic program was $180 billion. On February 2, 1982, you stated that this $180 billion was the direct cost to modernize and operate our strategic forces over the 6-year period fiscal year 1982 to fiscal year 1987. You stated that there was no significant change to this total resulting from the fiscal year 1983 budget.

What is the impact of the fiscal year 1984 budget on this $180 billion total, the reasons for any changes and what is the new total for the same estimate for the 6-year period beginning in fiscal year 1984 in constant fiscal year 1982 dollars and constant fiscal year 1984 dollars?

ANSWER. The fiscal year 1984 budget fully supports the overall $180B strategic program (fiscal year 1982–fiscal year 1987) that was announced in October 1981. A comparable figure for the 6-year period beginning in fiscal year 1984 is not available now. This is because the detailed FYDP data, on which the strategic program estimate is based, is only available through the 5-year period ending in fiscal year 1988. Estimates for fiscal year 1989 will be developed during the upcoming planning, programing and budgeting cycle.

### AIRLAND BATTLE DOCTRINE

Senator NUNN. Secretary Weinberger, what is the status of the changes to conventional doctrine enumerated in the AirLand Battle concept and what effort is being made at the OSD level to integrate programs and doctrine?

ANSWER. The AirLand Battle concept was used to write the Army's keystone doctrinal manual, "Field Manual 100-5, Operations". FM 100-5 is the basis for revisions to Army tactics manuals currently underway. In December 1982, the U.S. Army, U.S. Readiness Command and Tactical Air Command published a joint operational concept entitled: "Joint Attack of the Second Echelon (JSAK)." AirLand Battle doctrine was employed during Reforger 82 exercises in Europe and other exercises in Korea and in Conus. U.S. Army units today execute AirLand Battle within their capabilities. Current weapons modernization programs will provide a greater capability to execute the AirLand Battle to its full potential.

An integrated approach to joint weapons systems development in the interdiction arena has been initiated. Joint program offices have been established and a management oversight group is planned to ensure full definition of joint tactics, techniques and procedures. In addition, the JCS are currently evaluating means for improving the development of joint doctrine which may be required as more sophisticated target acquisition and attack systems become available to field commanders.

### OUTYEAR PROJECTIONS

Senator NUNN. Secretary Weinberger, what are the real growth rates projected in the outyears of the FYDP in 1986, 1987, and 1988?

ANSWER. We are forecasting real growth in TOA of 5.4 percent, 3.8 percent, and 4.0 percent in fiscal year 1986, fiscal year 1987, and fiscal year 1988 respectively.

Senator Nunn. Secretary Weinberger, you mention in your Posture Statement the Strategic Concepts Development Center and its input and contributions. What specifically is the Center doing, what is its composition and what projects has it completed and has underway?

Answer. The Strategic Concepts Development Center was established to conduct research on problems which transcend the day-to-day action orientation and organizational parameters of traditional staffs and provide a fresh and independent perspective on strategic concept and policy formulation. The SCDC is part of and collocated with the National Defense University. The SCDC professional staff consists of 11 senior civilian and military officers whose combined backgrounds represent an amalgam of academic experience, governmental service and operational military experience. As would be expected with a group of this type, two topics they have addressed cover wide ranging aspects of national security issues. They have examined the implications of critical military trends, identified new initiatives to strengthen our alliances, developed unique perspectives on how to capitalize on new concepts, and served as a candid and confidential source of strategic perspective.

### NATO IMPROVEMENTS

Senator Nunn. Secretary Weinberger what initiatives did you suggest to the NATO Defense Ministers in December related to conventional improvements? What did the NATO Ministers agree to do?

Answer. During the December 1982 Ministerial, I emphasized the need to comply with the Bonn Summit mandate for strenghtening our military posture, including exploring ways to take full advantage, both technically and economically, of our emerging technologies. For our part, we tabled a paper on "Taking Advantage of Emerging Technologies to Improve Conventional Defense." Our chances of achieving the objective of the paper are enhanced by the considerable work that had already been conducted in NATO, SHAPE and the Conference of National Armaments Directors (CNAD). Many Alliance members have similar national efforts now under way.

In addition to the overall effort to move forward in NATO fora, the United States is now working on a followup paper for the use of emerging technology to improve conventional defense on NATO's flanks and to improve NATO's maritime capabilities.

The Executive Working Group of the Defense Planning Committee at NATO has been charged to handle matters related to emerging technologies and has moved to establish appropriate mechanisms. Although this effort is still in its early stages, the allies have expressed, in general, their support for this effort.

Concerning earlier U.S. initiatives, the bulk of the LTDP measures have now been incorporated into the NATO force goals so they will no longer be reported on as a separate program. That, of course, does not mean that the program is complete. We will continue to watch it as part of the NATO force goals and improvements.

It is gratifying to note that 70 percent of the measures are now progressing satisfactorily compared to only 40 percent in 1981.

The program that Head of State and Government approved in 1978 has played an important role in making substantial improvements and we hope that the rate of improvement and the momentum that was secured in 1982 over 1981 will continue.

### COST OF U.S. COMMITMENTS TO NATO

Senator Nunn. Secretary Weinberger, 1980, 1981 and 1982, in the Defense Department provided the committee with updated information concerning the costs of the U.S. commitment to NATO for fiscal year 1974—fiscal year 1982. I know that the committee found this information helpful. It again would be helpful if you could (1) provide the same information for fiscal year 1984, (2) update the data for fiscal year 1981, 1982, and 1983, and (3) revise the constant dollar calculations to fiscal year 1984 dollars. I would also appreciate the same data using current dollars. Please use the format, categories and definitions which are reflected in the charts you provided as depicted in on page 61 of Part I, DOD Authorization Hearings for fiscal year 1983.

Answer. *Cost of withdrawing U.S. forces from Europe background.*—As you state this is a recurring question by Congress. In responding to similar requests in the past, DOD has derived its cost estimates by "allocating" the total defense budget to various regions of the world. This approach has several serious shortcomings, however. The two most obvious are:

(a) U.S. forces are multipurpose. While U.S. forces are available to meet any aggression in Europe by the Soviet Union and its allies, they must also be able to respond to threats against U.S. security interests in other regions of the world. Thus, even if our NATO commitment were suddenly to disappear, we would not necessarily be able to inactivate a significant portion of the forces now stationed in Europe, much less those in Conus whose current primary mission is rapid deployment to Europe.

(b) Much of our force structure that could not be directly allocated to Europe under any defensible methodology nevertheless supports common allied interests. An example is our strategic nuclear forces.

Although congressional inquires concerning the costs of our NATO deployments have been phrased in a variety of ways, it seems clear that they are based on a notion that budgetary savings could be achieved by withdrawing some of our forces from Europe. This notion cannot be explored using an allocation approach and, quite frankly, it should not be considered seriously without reference to the political and military implications discussed below and to existing agreements among the allies. It requires an analysis that establishes a precise scenario for redeploying forces from Europe to Consus and identifies the costs or savings associated with each of the major elements of that scenario. We have conducted such an analysis and, without repeating the entire analysis which is included in the Secretary of Defense's Annual Report to Congress, believe the results are quite interesting.

*Political and military implications of U.S. troop withdrawals.*—Before presenting the analysis, I feel it is important to reiterate some basic tenets related to forward deployment, a key supporting policy of our defense strategy.

U.S. forces are maintained in Europe directly in support of U.S. political and military interests—not as an act of charity toward our allies. Our force presence is an integral part of our NATO defense commitment, and withdrawals of the scale discussed in the following analysis would weaken our credibility both with our allies and with potential adversaries. Our presence helps foster deterrence by demonstrating U.S. resolve.

The adequancy of NATO's conventional defenses, particularly in the Central Region, in effect determines the threshold of nuclear war. A strong conventional defense raises the threshold; a weak defense lowers it. Recognizing that strong conventional defenses reduce the likelihood of war, whether conventional or nuclear, in Western Europe, the United States and its allies have taken measures to bolster their defenses.

At the Bonn Summit meeting in June 1982, President Reagan reaffirmed the United States' commitment to the NATO Alliance. He underscored emphatically our adherence to the principle that the security of all allies in indivisible and stated that there will be no unilateral withdrawal of the American presence in Europe.

*Illustrative scenarios.*—A summary of the illustrative scenarios evaluated in our analysis is presented in Chart I. Major variables include the number and type of forces withdrawn; whether or not the equipment of returning Army forces would be prepositioned in Europe; whether or not additional mobility forces would be procured and, if so, the type (i.e., airlift vs. sealift); and whether the withdrawn forces would be retained in the active force or placed in the reserves.

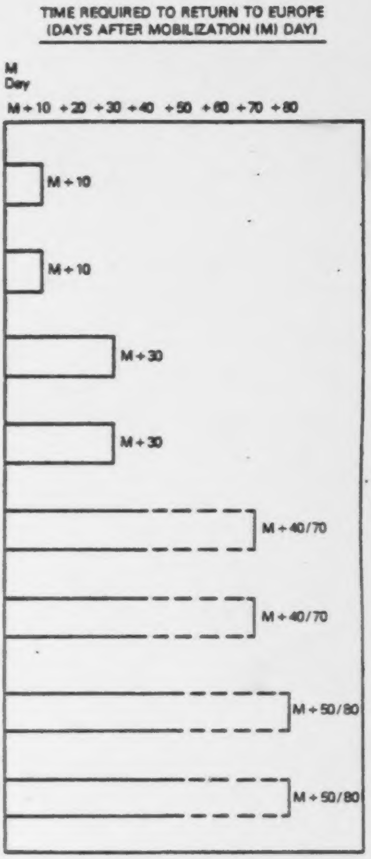
The scenarios are listed generally in order of how quickly the withdrawn forces would be able to return to Europe in an emergency. For Scenarios 1A, 1B, 2A, and 2B, the return time was an "input" assumption—that is, we specified that the forces were to return by M+10 (Scenarios 1A, 1B) or M+30 (Scenarios 2A, 2B) and then determined the type and amount of mobility forces that would be needed to meet those objectives. For the remaining scenarios, which entail neither prepositioning nor additional lift, return time is largely a function of lift availability and unit readiness. For Scenarios 3A and 3B, the units could deploy more quickly than indicated in Chart I if they were given high-priority on the time-phased deployment list, but this would delay the deployment of other combat forces. Because of this "ripple" effect, the net impact in terms of the total number of combat forces arriving in the theater over time would be the same as if the withdrawn units had awaited their turn for the first available lift.

*Cost Impact of Troop Withdrawals.* Chart II depicts the total fiscal years 1984-1988 costs/savings associated with each scenario.

CHART I

## SUMMARY OF SCENARIOS

| Scenario | Forces Withdrawn from Europe | Prepositioned Army Equipment in Europe | Additional Lift | Status in CONUS Active/ Reserve |
|---|---|---|---|---|
| 1A | 1 Army Division<br>1 Tac Air Wing | Yes | Airlift | Active |
| 1B | 1 Army Corps<br>2 Tac Air Wings | Yes | Airlift | Active |
| 2A | 1 Army Division<br>1 Tac Air Wing | No | Sealift | Active |
| 2B | 1 Army Corps<br>2 Tac Air Wings | No | Sealift | Active |
| 3A | 1 Army Division<br>1 Tac Air Wing | No | None | Active |
| 3B | 1 Army Corps<br>2 Tac Air Wings | No | None | Active |
| 4A | 1 Army Division<br>1 Tac Air Wing | No | None | Reserve |
| 4B | 1 Army Corps<br>2 Tac Air Wings | No | None | Reserve |

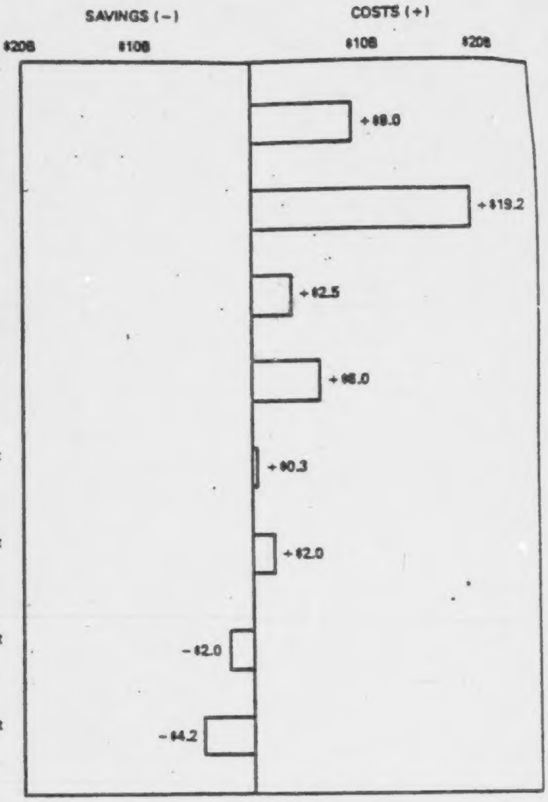


Note:
In Addition to the Major Combat Unit Withdrawals Indicated Here, the Air Force Has Included in Its Cost Analysis Other Associated Actions It Would Take Under the Scenarios Addressed in This Analysis. These include, Among Other Things, a Variety of European Base Closures and Consolidations.

CHART II

## SUMMARY OF 5 YEAR (1984-88) SAVINGS / COST (FYDP $ IN BILLIONS)

| Scenario | Forces Withdrawn | Scenario Description |
|---|---|---|
| 1A | 1 Division<br>1 Wing | POMCUS<br>Additional Airlift<br>Active, M + 10 |
| 1B | 1 Corps<br>2 Wings | POMCUS<br>Additional Airlift<br>Active, M + 10 |
| 2A | 1 Division<br>1 Wing | Additional Sealift<br>Active, M + 30 |
| 2B | 1 Corps<br>2 Wings | Additional Sealift<br>Active, M + 30 |
| 3A | 1 Division<br>1 Wing | No Additional Lift<br>Active<br>M + 40/70 |
| 3B | 1 Corps<br>2 Wings | No Additional Lift<br>Active<br>M + 40/70 |
| 4A | 1 Division<br>1 Wing | No Additional Lift<br>Reserve<br>M + 50/80 |
| 4B | 1 Corps<br>2 Wings | No Additional Lift<br>Reserve<br>M + 50/80 |



The telling point is that all of the scenarios calling for a rapid return of the forces in an emergency would require substantial net increases in TOA during fiscal years 1984–88. These added costs could range from approximately $3 billion to $19 billion, depending on the size of the withdrawal and how rapidly the forces were to return (M+10 vs. M+30).

The scenarios that would retain the forces on active duty without additional POMCUS or mobility forces (and therefore of significantly lower value to the Alliance) would also result in net increases—$2 billion for the larger withdrawal (the "B" scenarios) and around $300 million for the smaller one (the "A" scenarios) during the 5-year period considered.

The only scenarios that would generate a net savings during the 5-year period are those that would reduce active force structure. The estimataed 5-year savings range from approximately $4 billion for the larger withdrawal to about $2 billion for the smaller one.

## NATO RELATED ITEMS IN DOD PROGRAM

Senator NUNN. What does the fiscal year 1984 budget request reflect in terms of our NATO commitment? What initiatives and funding pluses and minuses are in fiscal year 1984 program in respect to our NATO commitment? What programs are being changed and in what respect?

ANSWER. Selected major items in the fiscal year 1984 budget and fiscal years 1984–1988 program of importance to NATO are outlined below. In reviewing this material it is important to recognize that for most programs there is no clearly defined dividing line between "NATO" and "Non-NATO" elements. Most force elements have more than one purpose and in any major confrontation with the Warsaw Pact all forces that could contribute would be made available.

*Intermediate-range nuclear forces.*—During 1983, we will complete development of both Pershing II and GLCM. The United States is moving ahead with plans to deploy these systems in Europe beginning at the end of this year because the Soviets have not yet agreed to our proposal to ban all United States and Soviet nuclear missile systems of this range. The Pershing II ballistic missile, follow-on to the shorter-range Pershing IA now deployed in Europe, has a range of 1,800 kilometers (km). GLCM has an operational design range of 2,500 km.

*Land force structure.*—Fiscal year 1984 will be a year of major change in our active land force structure. Major initiatives include: (1) continuing reorganization of our armored and mechanized divisions aimed at optimizing our force modernization effort, and (2) increasing the support structure of the active force while depending on the reserve components to round out active combat structure. Most of our armored and mechanized divisions will convert to either the final Division 86 force structure or an interim configuration. We will activate 45 new active units thus significantly increasing our ammunition-handling capacity and air defense capabilities.

*Land forces sustainability.*—Our fiscal year 1984–1988 program continues an effort begun last year to build up our inventory of war reserve munitions to a level sufficient to sustain U.S. forces in Europe and elsewhere for 60 days. Our procurement schedule will allow us to approach that goal for most items. We are also increasing the "go-to-war" stocks of spare parts and are building war reserve stocks of those items to match the sustainability objectives specified for munitions.

*M1 Abrams tank.*—M1 production continues at a rate of 60 per month with the Army's M1 acquisition objective of 7,058 tanks anticipated by the end of the fiscal year 1990 FDP. We currently plan to begin deploying an improved version of the M1 (designated M1E1) with a 120mm main gun in late fiscal year 1985. Approximately 51 percent of the total M1 force will be equipped with this larger gun.

*The Bradley fighting vehicle system (BFVS).*—The first production BFVS—the Army's new armored personnel carrier—was delivered in May 1981. By the end of the fiscal year 1983 FDP, the Army will have received a total of 1,700 of these vehicles. Our fiscal years 1984–1988 program proposes to increase the BFVS production rate to a maximum of 90 vehicles per month by the end of fiscal year 1986. This production schedule will allow the Army to achieve its acquisition objective of 6,882 BFVs by the end of the fiscal year 1989 FDP.

*TOW missile system.*—The Army and Marine Corps have programed funds to continue procurement of an improved version of the TOW anti-tank missile incorporating an improved warhead and guidance system. In addition, a new version of TOW (TOW 2), designed to be capable of defeating advanced-technology armor, is scheduled for initial delivery in the early 1980's.

*Division air defense (DIVAD) gun.*—The self-propelled, twin-40mm DIVAD gun is the planned replacement for the self-propelled, Vulcan 20mm gun now deployed in the Army's heavy divisions. The initial production contract for DIVAD was signed in May 1982, and the first units are scheduled to be delivered in September 1983. The planned production schedule will permit the Army to achieve its acquisition objective of 618 guns by the end of the fiscal year 1989 FDP.

*Patriot.*—The Patriot is the Army's advanced all-altitude air defense missile system. Its multifunction, phased-array radar gives it a significant electronic counter-countermeasures (ECCM) capability. The Patriot will be highly effective against all aircraft and cruise missiles likely to be encountered through the end of the decade and beyond.

*MLRS.*—The Multiple-Launch Rocket System is a high-rate-of-fire general support artillery rocket system. Deployment of the system will begin in fiscal year 1983, and the system has been approved for multiyear procurement. The Army is continuing a multinational program to develop a terminally guided submunitions (TGSM) for the MLRS.

*Land forces ammunition.*—In fiscal year 1984, we will continue to build our inventories of improved conventional munitions (ICM's), rocket-assisted projectiles (RAPs), and scatterable mines. We are requesting $878 million in fiscal year 1984 to procure these items for 155mm and 8-inch artillery.

*Tactical and support vehicles.*—The Army and Marine Corps will continue to upgrade their tactical wheeled vehicle fleets, thereby relieving some of the severe problems caused by shortages and over-age, over-mileage vehicles. Both services are continuing programs to procure commercial vehicles for use in a variety of tasks. Their use reduces mileage and wear on the more expensive and scarce tactical vehicles.

*Expansion of naval force structure.*—By the end of fiscal year 1983, the force will be 506 ships. Counting our sealift, auxiliary, deployable battle and reserve mobilization ships brings the force total to 559 ships. The deployable battle force will grow to about 610 ships and the total operating inventory to about 650 ships by the early 1990s, when nearly all the ships in our 5-year shipbuilding plan will have joined the fleet.

*Land-based force for sea lane defense.*—The fiscal year 1984 budget includes programs that (1) improve our wide-area surveillance and early warning capabilities, through accelerated OTH radar development and use of Airborne Warning and Control System (AWACS) aircraft to support land-based fighters in maritime air defense operations; (2) improve our tactical C$^3$ capabilities, through a program to make the communications equipment in our AWACS aircraft more jam resistant; and (3) improve the ability of our naval and air forces to function as an integrated team in sea lane defense operations.

*Tactical air combat readiness and sustainability.*—The fiscal years 1984–1988 program improves both the near- and long-term combat readiness and sustainability of our tactical air forces. We will continue to fund initiatives over the next 5 years to eliminate operating spares deficits to reduce service maintenance backlogs, and to increase total flying hours. With respect to sustainability, our current program is designed to reach a [deleted]. Toward this end we have funded War Readiness Spares Kits (WRSK), Base Level Supply Sufficiency (BLSS) items, War Reserve Material (WRM) munitions, and Other War Reserve Material (OWRM) requirements.

*Tactical air combat modernization.*—We have programed funds in fiscal year 1984 to procure 48 F-15s and 120 F-16s. We are also pursuing a vigorous modernization program to preserve our advantage in the latter half of the decade, when the Soviets are expected to deploy a new generation of fighter aircraft with improved air-to-air combat capabilities. Our fiscal year 1984–88 program provides continued funding for several weapons development programs, such as the Advanced Medium-Range Air-to-Air Missile (AMRAAM).

*Tactical air electronic warfare and defense supression.*—Our fiscal year 1984–88 program requests funding for a balanced mix of systems designed to neutralize, disrupt, and destroy critical elements of the enemy's integrated air defense system. Our programs in this area include the High-Speed Anti-Radiation Missile (HARM) and the Precision Location Strike System (PLSS).

*Tactical air target acquisition, surveillance, warning and reconnaissance.*—Funding for AWACS will continue in fiscal year 1984. This aircraft is equipped with a long-range, look-down radar with substantial jamming resistance. We are planning to procure 5 TR-1 aircraft in fiscal year 1984. This will provide the Air Force with continuous, all weather surveillance of the battle area.

*Mobility program.*—For the program period, our goal is to be able to reinforce NATO with six Army divisions, a Marine Amphibious Brigade (MAB), and 60 tactical fighter squadrons—all with initial support—in 10 days.

*Expanding airlift capability.*—We are requesting funds over the next 5 years to procure 50 additional C-5 aircraft and 44 additional KC-10 aircraft, while continuing to investigate methods of increasing the Civil Reserve Air Fleet. These programs add airlift capability at an accelerated rate, but will not satisfy our future airlift requirements. Accordingly, the fiscal year 1984 budget includes a request for funds to continue research and development related to the C-17 cargo aircraft.

*Sealift mobility.*—To increase the utility of the SL-7 container ships, we have placed high priority on converting them to a "roll-on/roll-off" configuration. We are requesting funds in fiscal year 1984 to complete the full conversion of these ships. We have also programed funds to expand the size of the Ready Reserve Fleet (RRF). Our 5-year program calls for the expansion of the force to 77 ships by fiscal year 1988.

*Pre-positioned material configured to unit sets (POMCUS).*—We have a commitment to our NATO allies to provide a total of six divisions sets of equipment. To begin shipment of equipment for POMCUS divisions sets five and six, we are submitting a fiscal year 1983 Supplemental Appropriate Request. The fiscal year 1984 budget requests funds to continue shipment of equipment for the final two sets.

*Air Force pre-positioning.*—The European program, which began in fiscal year 1983, will pre-position equipment for tactical fighter forces.

*Marine Corps pre-positioning.*—The Marine Corps is continuing a land based prepositioning program in Norway, where it is storing equipment for a Marine Amphibious Brigade (MAB) to assist in the defense of NATO's northern flank.

*Military construction*—Many wartime operational facilities are funded by the NATO Infrastructure Program. The U.S. contribution to this multi-nation construction program will be $300 million in fiscal year 1984, of which half will be funded from fiscal year 1983 and prior appropriations. The funds will help support high-priority initiatives such as theater nuclear force modernization and the Long-Term Defense Program. Projects that are not eligible for NATO funding will cost roughly $1 billion in fiscal year 1984. They include unaccompanied housing and dining facilities ($124 million), family housing ($136 million), schools ($91 million), community support ($50 million), and operational and other facilities ($696 million).

*Host nation support.*—The German government has agreed to organize in peacetime reserve units that during crisis or war would be dedicated to providing logistics support to U.S. forces in Germany. These new German units will comprise about 93,000 German reservists. The agreement also formalizes the intention of the Germans to provide extensive support from their civil sector durng crisis and war. We estimate that the 93,000 German reservists will cost about one-tenth of what it would cost to provide the same capability with U.S. Reserve Component units and less than one-fortieth of what it would cost to provide that capability with U.S. active forces. We have budgeted $41.0 million for our fiscal year 1984 share of this agreement.

Chairman **Tower**. Mr. Secretary and General Vessey, thank you very much for your appearance here today.

I might say, Mr. Secretary, that I happen to be one of those that believes that although we might be able to achieve some economies in the defense budget, and I hope we can, that we cannot make really substantial cuts that would impact significantly on the deficit without cutting into the bone and sinew of our defense effort.

We are prepared to describe to you which commitments we feel that we can stand down on. I think that will be essential before we make any judgment on that point.

Thank you for your appearance here, Mr. Secretary. We look forward to seeing you again, and General Vessey.

Secretary **Weinberger**. Thank you, Mr. Chairman.

I want to express the appreciation that you have always extended to us, as well as for today. Thank you.

Chairman **Tower**. Thank you, sir.

[Whereupon, at 4:17 p.m., the committee recessed, subject to the call of the Chair.]

# Report of the Secretary of Defense
# Caspar W. Weinberger
# to the Congress

on the

## FY 1984 Budget, FY 1985 Authorization Request
## and
## FY 1984-88 Defense Programs

February 1, 1983

This Report Reflects the FY 1984 Defense Budget
as of January 31, 1983

TO THE CONGRESS OF THE UNITED STATES

Over the past two years the Congress, the President, and the Department of Defense together have undertaken the long, hard job of rebuilding America's defenses. We came to this common effort with what I believe is a fundamental consensus about the challenge facing our national security. For twenty years the Soviet Union steadily accumulated enormous military might, while the United States restrained its own military spending to the point where investment in defense actually declined in real terms during most of the 1970s. The result was a shift in the military balance that threatens our ability to deter aggression, and, if deterrence fails, threatens our ability to defeat aggression.

Congress and President Reagan, as a candidate, took the lead in sounding the warning about our inadequate defenses, and Congress began the rearmament effort when it appropriated funds above President Carter's defense budget requests for FY 1981. Since then, Congress has strongly supported President Reagan's defense plans, giving the President 95% of the outlays he requested for defense in the current fiscal year and 99% in FY 1982. The President deeply appreciates this continued bipartisan support for a stronger defense, and so do I.

It is not enough, of course, simply to devote more resources to defense. Our aim is not to outspend the Soviets. Rather, our aim is to determine the nature and extent of the threats to our vital national security interests, to develop a strategy to meet these threats, and then to achieve the capabilities needed to put that strategy into effect within the constraints of our resources. This is our long-range plan. It is also the structure of this year's Annual Defense Report.

Part I, the "Defense Policy" section of this Report, begins with a discussion of our basic foreign policy goals, and the national security objectives necessary to achieve these goals. This first section goes on to describe the very real threat we face, particularly the Soviet Union's increasing capability to upset the stability of nuclear deterrence, to project its power far beyond its borders, and to attack swiftly with larger, modernized, and increasingly flexible forces in more than one place at a time. Our strategy for meeting this rapidly growing threat, like the strategy of preceding Administrations, is based on the principle of deterrence. But to maintain deterrence, and to provide an incentive for meaningful arms reduction, we must have a credible capability for responding to attack in the terrible event that deterrence fails. For this we need modern, combat-ready, flexible, and sustainable conventional forces, and nuclear forces that could survive a first strike and still pose a credible threat of effective retaliation.

Having formulated our defense policy with an honest look at the threats we face, we must budget to carry out that policy with an honest look at our available resources. Part II of the Annual Defense Report, "Defense Resources," begins with an overview of the defense budget and its relationship both to the entire federal budget and to the economy as a whole. In his FY 1984 defense budget, the President is proposing Total Obligational Authority of $274.1 billion, which represents a 10% real increase over FY 1983. This brings defense spending to 28% of the total federal budget, and 6.8% of GNP.

The amount of defense we can secure depends not only on how many of the taxpayers' dollars are provided in the budget, but also on how carefully each one of them is spent. For this reason I have focused heavily in Part II on what might be called the "entrepreneurial" resources of the Department of Defense: our efforts to improve management efficiency through better planning and improved acquisition procedures, and to cut back on waste, fraud, and abuse through improved audits.

But fiscal resources are just part of the picture. Part II also addresses our plans in the area of manpower resources -- our need to recruit, train, and retain men and women for our armed forces in the face of a declining number of military-age youth, and heavy competition from the private sector for trained personnel with valuable technical skills. Finally, the section evaluates our capital resources, that is, the ability of the U.S. industrial base to meet new defense production needs, and the Department of Defense's efforts to enhance industrial capabilities.

The last section of the Annual Defense Report, "Defense Programs," offers a detailed account of just what capabilities the defense budget will buy, and why they are needed to implement our defense strategy.

Let me conclude by making just two points about the Reagan Administration's defense program. The first is that a decade of neglecting investment in defense has forced us, as it were, to accept "double-duty." First, we have had to act quickly to increase the basic readiness and sustainability of our forces, so that we could meet an immediate crisis if one arose. At the same time we must make up for lost years of investment by undertaking the research and development and force modernization needed to meet threats that may arise in the future. We simply cannot avoid fulfilling this double-duty, short of passing on to future Administrations and future Congresses the legacy of neglect we have inherited, and imperiling the nation by allowing our deterrent capability to weaken to the point of danger. The President is determined not to do that, and I believe the Congress shares his determination.

Neither this Congress nor this Administration begins the defense program with a clean slate. Defense acquisition is a very long-term process. Not every weapon system or project for which we seek an appropriation (many of which were begun many years ago) meets all the specifications we would desire; some have cost more than they would have if developed more efficiently, or more quickly. But all of them respond to a real threat and fill what would otherwise be a gap in our defense capabilities. In the long run we are seeking to limit our losses from the past, and to improve the effectiveness of our acquisition programs for the future. In the short run we cannot face an adversary with weapons that are still on the drawing board. We need a great deal now if we are to preserve the peace today and set in motion the steps needed to preserve the peace tomorrow.

Over the past two years we have made great strides together in rebuilding America's defenses. Our readiness has improved substantially, and we have begun to regain the deterrent capability that can keep peace with freedom. Let us not falter now. Only by demonstrating that we will persevere and achieve sufficient strength to meet any adversary can we offer an incentive for genuine arms reduction, and preserve the deterrence which undergirds a lasting peace and freedom.

CASPAR W. WEINBERGER

## A. FOUNDATIONS OF DEFENSE POLICY

In the First Report of the Secretary of Defense, presented to Congress in 1948, Secretary of Defense James Forrestal began his discussion of "National Security and Foreign Policy" with the observation that:

> "It is our duty to see that our military potential conforms to the requirements of our national policy; in other words, that our policy does not outstrip our power."

### 1. Foreign Policy

Matching the ability to carry out our foreign policy with the policy itself is a fundamental responsibility of the Reagan Administration, as it has been of every Administration preceding it. While the threats and circumstances facing the United States, and the strategies and capabilities needed to meet them have changed over time, the nation's fundamental vital interests and the foreign policy needed to protect them have remained constant. They are:

- -- To preserve our freedom, our political identity, and the institutions that are their foundation -- the Constitution and the rule of law.
- -- To protect the territory of the United States, its citizens, and its vital interests abroad from armed attack.
- -- To foster an international order supportive of the interests of the United States through alliances and cooperative relationships with friendly nations; and by encouraging democratic institutions, economic development, and self-determination throughout the world.
- -- To protect access to foreign markets and overseas resources in order to maintain the strength of the United States' industrial, agricultural, and technological base and the nation's economic well-being.

Our foreign policy naturally encompasses far more than purely military concerns. Likewise, the ability to promote our foreign policy and protect our vital interests depends on more than military power. It requires as well economic strength and technological advancement; the operation of our diplomacy and the flow of information about the United States abroad; and the political will and patriotism of a free people. We seek to integrate all these aspects of our national power with our foreign policy. But we also recognize that our economic and political power are imperiled if we lack the military strength to defend our interests.

### 2. National Security Objectives

In assessing our ability to protect our vital interests and conduct a successful foreign policy, the Reagan Administration, like previous Administrations, believes that the Soviet Union poses, and for the foreseeable future will continue to pose, the most formidable military threat to the United States, and its interests. Threats to our interests may arise from other sources or circumstances, but only the Soviet Union has the military power directly to inflict mortal damage on the United States. Given the interests we must protect, and the wide-ranging and rapidly growing military power of the Soviet Union, this Administration has formulated a series of overall national security objectives in support of its foreign policy. Many were established by previous Administrations; others are new or have been modified to respond to changes and emerging trends in the international situation. The highest-priority national security objectives of the Reagan Administration are:

-- To deter military attack by the USSR and its allies against the United States, its allies, and other friendly countries; and to deter, or to counter, use of Soviet military power to coerce or intimidate our friends and allies.

-- In the event of an attack, to deny the enemy his objectives and bring a rapid end to the conflict on terms favorable to our interests; and to maintain the political and territorial integrity of the United States and our allies.

When others know we are ready and able to respond to attack in ways that achieve this objective, we reinforce our ability to deter attack -- our first national objective.

-- To promote meaningful and verifiable mutual reductions in nuclear and conventional forces through negotiations with the Soviet Union and the Warsaw Pact, respectively; and to discourage further proliferation of nuclear weapons throughout the world.

Our aim is to secure the strength needed to deter, or if necessary defend against, nuclear and conventional attack, as well as to discourage coercive use of Soviet military power. A sustained commitment to redress any significant imbalance will not only strengthen our deterrent capabilities but also will improve prospects for agreements on arms control and reductions.

-- To inhibit further expansion of Soviet control and military presence, and to induce the Soviet Union to withdraw from those countries, such as Afghanistan, where it has imposed and maintains its presence and control by force of arms.

-- To foster a reduction in the Soviet Union's overall capability to sustain a military buildup by preventing, in concert with our allies, the flow of militarily significant technologies and material to the Soviet Union, and by refraining from actions that serve to subsidize the Soviet economy.

### 3. Regional Objectives

Our position in the free world requires that we forge an effective and broad coalition, integrating the full range of capabilities of our allies and friends with our own. Therefore, we have a series of specific regional objectives to carry out our overall national security objectives.

The security of Western Europe is particularly vital to the security of the United States. This linkage is manifested in the Atlantic Alliance and our long-term deployment of major land, naval, and air forces in and around Western Europe, including the Sixth Fleet in the Mediterranean. Our objectives in Europe are:

-- To strengthen NATO's and our own capability to deter or defeat the threat posed by dramatically improved Soviet and Warsaw Pact forces; to achieve major improvements in NATO's conventional land and sea-based capabilities in order to reduce the danger of conflict; to improve the nuclear deterrent balance in Europe; and to obtain increased allied contributions for the common defense in Europe, in Southwest Asia, or in other areas where the security of NATO countries may be threatened.

The importance to the United States of the security of East Asia and the Pacific is demonstrated by the bilateral treaties with Japan, Korea, and the Philippines; the Manila Pact, which adds Thailand to our treaty partners; and our treaty with Australia and New Zealand -- the ANZUS Treaty. It is further enhanced by the deployment of land and air forces in Korea and Japan, and the forward deployment of the Seventh Fleet in the Western Pacific. Our foremost regional objectives, in conjunction with our regional friends and allies, are:

-- To maintain the security of our essential sea lanes and of the United States' interests in the region; to maintain the capability to fulfill our treaty commitments in the Pacific and East Asia; to prevent the Soviet Union, North Korea, and Vietnam from interfering in the affairs of others; to build toward a durable strategic relationship with the People's Republic of China; and to support the stability and independence of friendly countries.

The United States maintains vital interests and important relationships with friendly states in the Near East/Southwest Asia. In addition to the Sixth Fleet in the Mediterranean, we deploy naval forces in the Indian Ocean. Our objectives in this region are:

-- To preserve and protect the independence of states in the region, including both Israel and friendly Arab nations, from aggression and subversion; to help secure a lasting peace for all the peoples of the Mideast; to prevent the spread of Soviet influence and the consequent loss of freedom and independence it entails; and to protect Western access to the energy resources of the area, and to maintain the security of key sea lanes to this region.

In the Western Hemisphere, the Rio Treaty confirms our long-standing commitment to the security of our Latin American neighbors. Our objectives are:

-- To maintain the security of the North American continent, the Caribbean Basin, and the Panama Canal; to promote economic development and the strengthening of democratic institutions, and to support the independence and stability of friendly governments; to counter the projection of Soviet and Cuban military power and influence in the Caribbean Basin and South America;

and to strengthen U.S. political and defense relationships with friendly countries.

In Africa, our objectives are:

-- To assist African countries that are the targets of subversion, and to support the independence and stability of friendly governments; to maintain and, as required, expand access and transit rights in pro-Western African states for the deployment of U.S. forces; to work to deny or reverse similar access and transit to the Soviets; and to preserve access to important mineral and petroleum resources.

The military dimension of U.S. national power is designed to support these regional objectives and our overall national security objectives. They in turn are derived from our foreign policy. To determine the size and structure of our armed forces, it is necessary first to assess the threats that could impede or prevent the successful conduct of our foreign policy and protection of our vital interests; second, to devise a strategy to cope with the threats; and finally, to determine the military capabilities required to implement that strategy.

## B. THREATS TO U.S. SECURITY OBJECTIVES

Our defense effort, particularly over the last decade, has not taken sufficient account of the continuing increase in the military capabilities of the Soviet Union and of the Soviets' willingness to use superior military strength or the threat of it to further their foreign policy goals. Soviet power threatens us directly and poses obstacles to the successful conduct of our foreign policy.

We recognize that the successful conduct of our foreign policy also requires protection against other dangers, for some threats arise independently of the Soviet Union. But more often than not, the magnitude and persistence of these other threats and our difficulties in countering them are greatly aggravated by Soviet policies, backed by the expanding reach of Soviet military power.

Many people believe that given the immense military power the United States and the Soviet Union command, changes in the ratio of forces have little consequence or can be easily corrected. They contend that the only danger to peace derives from the sheer accumulation of armaments on "both sides." They tend to overlook the fact that the critical point in deterring war and preventing aggression is maintaining a balance of forces. History has shown us all too often that conflicts occur when one state believes it has a sufficiently greater military capability than another and attempts to exploit that superior strength through intimidation or conflict with the weaker state.

Reducing military forces is, of course, desirable -- provided it can be done in a way that preserves or enhances U.S. security and diminishes the risk of war. This is precisely the purpose of President Reagan's arms control proposals to reduce conventional forces in Europe, to cut intercontinental nuclear forces drastically, and to eliminate U.S. and Soviet land-based intermediate-range nuclear missiles.

As a result of the 20-year Soviet arms buildup, however, and the collective failure of the United States and our allies to make a sufficient response, the global military balance has been shifting steadily against us; local threats against our allies and friends have increased as well. The deterrent strength of the Atlantic Alliance is increasingly threatened, offering opportunities for Soviet coercion in the event of crisis. Moreover, regions that once were free from the threat of Soviet armed forces have now come under the shadow of Soviet military power. Indeed, the Soviet empire has expanded through a chain of military outposts that threaten to outflank our traditional alliances. If these trends are allowed to continue unchecked, the result would be a fatal weakening of the Western alliances, and a drastic deterioration in the security of the United States.

Soviet military capabilities are augmented in Europe by their Warsaw Pact allies and in other key areas of the world by such client-states as Cuba, Libya, Vietnam, and North Korea. It is the Soviet Union, however, that produces the vast preponderance of the military materiel for the forces of its Eastern European and other allies and for its own forces. And it is the Soviet Union that influences to a large degree the policies and activities of those nations where it has stationed forces.

The United States also has strong allies, and it is important that we take their forces and capabilities into account. Their contributions are substantial and go a long way toward redressing the balance of forces. But even so, careful assessment of global trends over the past two decades leads to the very disturbing conclusion that the military power of the Soviet bloc has increased steadily relative to that of the free world, and that the geographic reach of Soviet and surrogate forces has expanded significantly. While the Soviets were building up their own forces -- and those of their allies and clients -- in size and quality over the last 20 years, we and our allies made inadequate military efforts. In the United States we seriously neglected our own force modernization as a result of the Vietnam war and the unrealized expectations of detente.

Consequently, we and our allies no longer confront -- as we did in the early 1960s -- a Soviet Union distinctly inferior in many measures of military power. Twenty years ago Soviet nuclear forces were clearly inferior to our own. Warsaw Pact ground forces, although large, had qualitatively poorer weapons, limited tactical mobility and sustaining power, and only marginally effective tactical air cover. Soviet forces in Southwest Asia were weak and were stationed at a considerable distance from the Persian Gulf, and a seemingly stable and friendly Iran was gradually upgrading its forces. Finally, the Soviet Navy had primarily self-defense capabilities, with limited potential for interdicting the vital sea lanes connecting us with our allies and with critical sources of raw materials.

By contrast, we are now faced with a Soviet Union that has deprived us of our advantage in nuclear arms. Warsaw Pact ground forces have been greatly modernized, are more mobile, and have more sustaining power; their air forces likewise have been modernized, and are becoming increasingly capable in air superiority, ground support, and interdiction missions. Soviet ground and air forces threatening Southwest Asia are being steadily improved, while our former ally Iran has collapsed into anarchical enmity and has become a potential target for the Soviets; and defense of the free world's access to vital Persian Gulf oil supplies now entails U.S. force projection over lengthy and vulnerable air and sea lines of communication, with limited reception facilities or support available on arrival. The Soviet Navy is now a genuinely "blue water" force with global missions. Its attack submarine and missile-equipped bomber forces in particular threaten interdiction of the free world's naval forces and vital shipping, while the growing numbers and sophistication of Soviet surface forces provide a new capability to project power. And finally, Soviet-bloc military forces now have access to a broader network of bases and facilities than ever before, expanding the range from which Soviet and Soviet-surrogate power might be applied. The Soviet Navy in particular has profited, gaining the use of bases in West Africa, Southwest Asia, and Southeast Asia.

### 1. Divergent Trends in Military Investment and Production

It is understandable that disagreements persist about the implications of the shift in the balance of military forces that has taken place over the last two decades. But the debate about the facts themselves is over: no serious observer can dispute the widely documented evidence on the size and scope of the Soviet buildup.

Despite their sluggish economic situation, and nationwide food shortages, the Soviets currently allocate an estimated 15% of their GNP to defense. If the annual growth rate of their economy slows, as expected, their defense allotment could reach as much as

20% of GNP in the not so distant future. The United States, on the other hand, annually spent an average of 5.9% of GNP on defense during the 1970's. Even with the defense program proposed by the Reagan Administration, we will still spend less than 8% of our GNP on defense.

Another useful way to measure U.S. and Soviet efforts is to compare military investment levels. It is a particularly meaningful measure because it gives us an indication of what capabilities both sides have now and what will be available to them in the future and because it is unaffected by differences in military pay and benefits. Military investment has two major components: (1) the inventory of weapon systems and military installations -- the more tangible elements of defense assets; and (2) the technological improvements in weapons resulting from research and development (R&D) -- which represent the less tangible elements of military capital.

Looking just at the United States and the Soviet Union, total Soviet military investment was nearly double ours by the early 1980s (see Chart I.B.1). This aggregate comparison can also be viewed in its component parts. For strategic nuclear forces, Soviet investment was about three times higher during 1980-81 than ours; for general purpose forces, it was about 50% higher; and for R&D expenditures, it ran at approximately twice our rate. This is in stark contrast to the overall situation 15 years ago. (See Chart I.B.2.)

Adding in allied military investments on both sides yields a somewhat more favorable picture for the free world because our allies contribute more than do the Soviets' allies. In 1981 total military investment outlays of the NATO countries and Japan still did not match total Warsaw Pact military investment outlays (see Chart I.B.3). This contrasts to almost equal investment levels a decade ago, and the considerably higher Western investment in the mid-1960s. The shortcoming of an allied military investment comparison, however, is that it fails to take account of the Warsaw Pact's greater ability to achieve interoperability and significant economies of scale by having its production concentrated in and standardized by the Soviet Union.

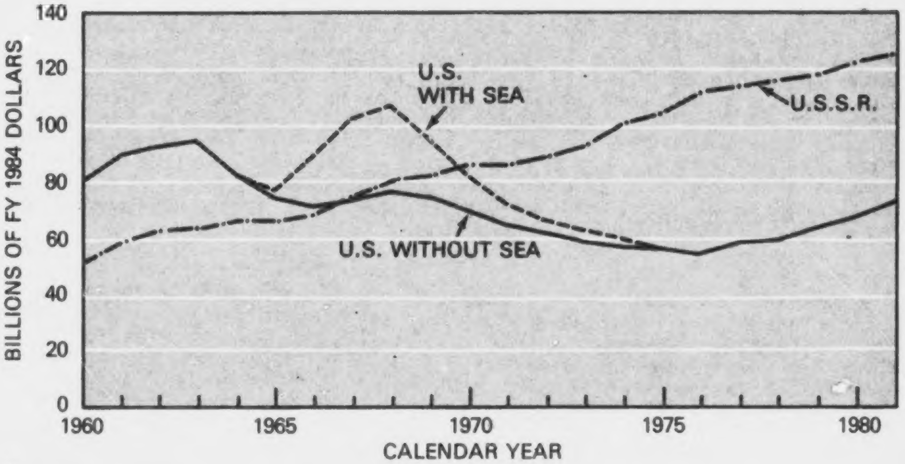
As a result of these divergent military investment trends, Warsaw Pact capabilities in each of the basic mission areas -- strategic, nuclear, ground, tactical air, and naval -- have improved markedly versus those of the free world.

In comparing U.S.-Soviet or NATO-Warsaw Pact military capabilities it is also important to measure output, i.e., what weapon systems their military investment has allowed each side to produce. (See Table I.B.1). Some of the more significant additions to the Soviet Union's inventory over the last nine years for which we have firm production data include approximately 2,000 ICBMs; 54,000 tanks and other armored vehicles; 6,000 tactical combat aircraft; 85 surface warships; and 61 attack submarines -- with much of this vast stockpile of materiel being comparable in quality to counterpart U.S. systems. Our own production over the same period was considerably less: roughly 350 ICBMs; 11,000 tanks and other armored vehicles; 3,000 tactical aircraft; 72 surface warships; and 27 attack submarines.

An alliance-to-alliance comparison of weapons production for the last nine years is also troubling: 2,000 ICBMs for the Warsaw Pact, versus 350 for NATO; nearly 67,000 Pact tanks and other armored vehicles, versus 24,000 for NATO; 6,900 Pact tactical combat aircraft, versus 5,700 for NATO. The Soviet Union and the Warsaw Pact have

Chart I.B.1

**U.S. AND SOVIET MILITARY INVESTMENT TRENDS**

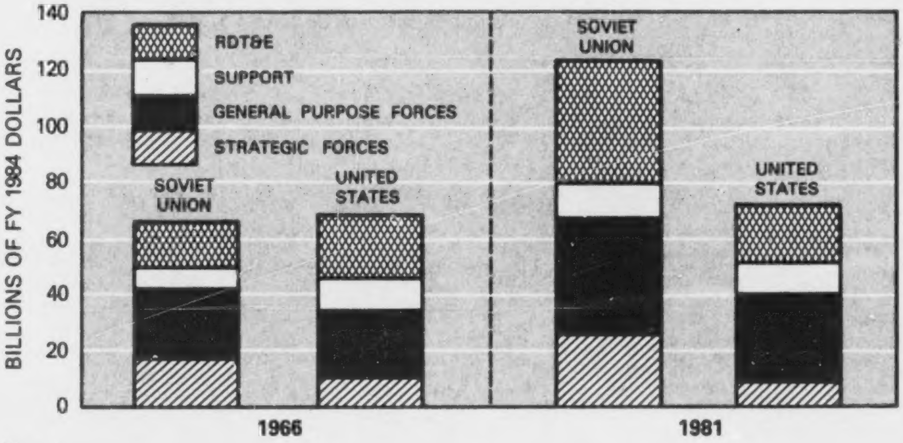


**Notes:**

- Investment Comprises Outlays for Procurement, Military Construction, and RDT&E
- U.S.S.R. Investment Is an Estimate of What It Would Cost the U.S. to Duplicate Soviet Investment Activities
- SEA: Southeast Asea (Vietnam War-Related) Investments

Chart I.B.2

**U.S. AND SOVIET MILITARY INVESTMENT BY MISSION AREA**

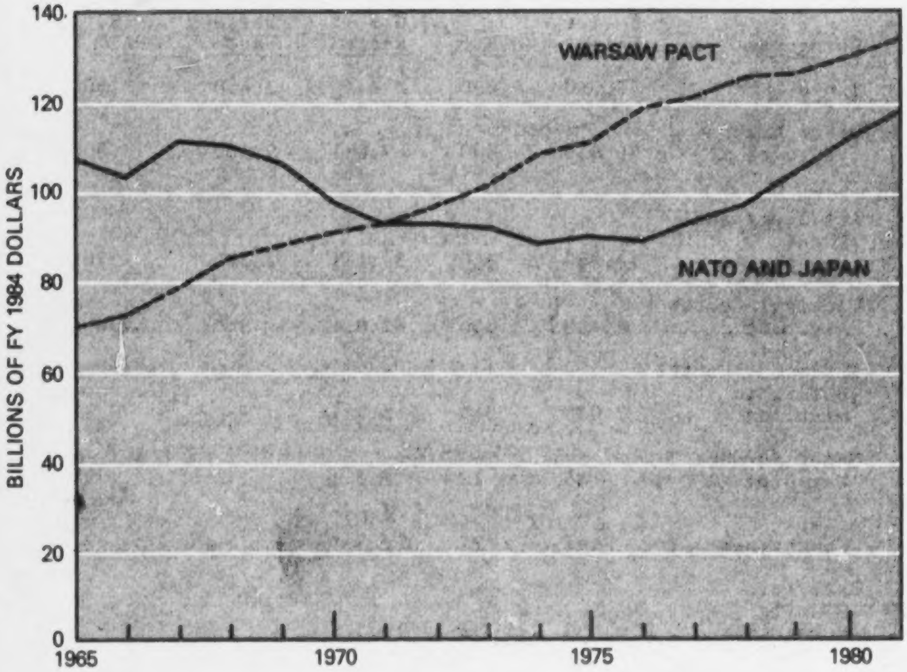


**Notes:**

- Mission Area Totals Include Outlays for Procurement and Military Construction
- RDT&E Is for All Mission Areas
- U.S. Investments for the Vietnam War Are Excluded
- Soviet Investment Is an Estimate of What It would Cost the U.S. to Duplicate Soviet Investment Activities

Chart I.B.3

## NATO PLUS JAPAN vs WARSAW PACT MILITARY INVESTMENT TRENDS



**Notes:**

Investment Comprises Outlays for Procurement, Military Construction, and RDT&E (NATO Figures Do Not Include U.S. Vietnam Investments). Warsaw Pact Investment Is an Estimate of What It Would Cost the U.S. to Duplicate Warsaw Pact Investment Activities.

TABLE I.B.1

Production of Selected Weapons [1]
1974-82

| Category | Soviet Union | U.S. | Soviet to U.S. Ratio | Non-Soviet Warsaw Pact | Non-U.S. NATO | Pact to NATO Ratio |
|---|---|---|---|---|---|---|
| Tanks | 17,350 | 6,400 | 2.7:1 | 3,450 | 2,600 | 2.3:1 |
| Other Armored Vehicles [2] | 36,650 | 4,800 | 7.6:1 | 9,100 | 10,300 | 3.0:1 |
| Artillery and Rocket Launchers | 13,350 | 350 | 38.1:1 | 1,300 | 700 | 14.0:1 |
| Tactical Combat Aircraft [3] | 6,100 | 3,050 | 2.0:1 | 800 | 2,650 | 1:2:1 |
| Intercontinental Ballistic Missiles | 2,035 | 346 | 5.9:1 | -- | -- | -- |
| Major Surface Warships | 85 | 72 | 1.2:1 | 10 | 79 | 0.6:1 |
| Attack Submarines | 61 | 27 | 2.3:1 | -- | 33 | 1.0:1 |
| Ballistic Missile Submarines | 33 | 2 | 16.5:1 | -- | 3 | 6.6:1 |
| Theater Nuclear Missiles [4] | 5,850 | 3,550 | 1.6:1 | -- | 1,450 | 1:2:1 |

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[1] Totals represent that portion of a nation's production earmarked for its own military services plus imports and excludes production for export.

[2] Includes light tanks; armored personnel carriers; infantry fighting vehicles; reconnaissance, fire support, and air defense vehicles.

[3] Includes fighter, attack, reconnaissance, electronic warfare, and all combat-capable tactical training aircraft.

[4] Includes ground- and sea-launched missiles. Also intermediate- and medium-range ballistic missiles.

outproduced the West in all but one category of major weapons -- general purpose naval warships: 211 NATO surface combatants and attack submarines versus 156 for the Pact. NATO's narrow lead in naval construction is hardly reassuring, however, in view of our greater reliance on the seas for both commercial and military shipping. This is especially the case when one considers that most of the naval forces of our NATO allies are required and available only for regional defense tasks, leaving for U.S. naval forces the major role in carrying out our other major naval missions: control of vital ocean areas and projection of power ashore in distant areas. These missions inherently require more ships than do the Soviets' major missions of attacking NATO shipping and naval forces operations, in which they would employ their long-range aircraft as well.

To provide additional information for our citizens on the scope and size of the Soviet buildup, we undertook a special effort to declassify more detailed data. Much of this was presented in last year's Annual Defense Report in a document entitled *Soviet Military Power*. The rapid pace of Soviet force improvements over the last 12 months has already made this document out of date. A revised edition will be issued within the next few months. In the interim, the highlights of Soviet military force changes over the past year can be summarized as follows:

-- Strategic forces continued a broad modernization and strengthening program. Significant developments include the first appearance of a new long-range, bomber prototype, called Blackjack; major progress toward operational service for the Typhoon submarine-launched ballistic missile system; further progress with long-range cruise missiles; and the first flight of a newly designed land-based, long-range ballistic missile.

-- The Soviet Army substantially increased its combat power through improvements in the numbers and types of equipment in existing units. There was also a gradual increase in the overall readiness of divisions, although many divisions continued to rely on substantial augmentation by readily available reserve personnel to achieve their combat potential.

-- The Soviet Navy took delivery of several impressive new general-purpose ships, such as a third KIEV-class V/STOL aircraft carrier, new cruisers and destroyers, and several new classes of submarines.

-- Soviet tactical air forces continued to undergo a major modernization, involving production of about 1,100 additional modern fighter and attack aircraft for air defense and tactical forces, as well as export purposes. The Soviets' rapid pace of modernization gives their aircraft a low average age, but qualitatively they remain behind us. Two new fighters now in the late stages of development are expected to narrow the gap in equipment quality as they enter large-scale use during the late 1980s.

### 2. Potential Capabilities of Today's Soviet Forces

The cumulative effect of the Soviet buildup has been to change the type of attack we might confront and the areas in which we could be attacked, and to increase greatly the effectiveness of such an attack. It was not so long ago that the Soviet Army, although very large, was effectively limited to slow-moving offensives, which would allow the West the opportunity to exploit our air power and to mobilize our military strength. The Soviet Army had large numbers of tanks but was short of trucks; it had many and powerful guns, but lacked adequate communications equipment. Now the Soviet Army fields a comprehensive range of modern equipment. It is a fast-moving and highly flexible force, and hence far more difficult to contain than the ponderous Soviet Army of the past. In addition to being more extensively modernized, Warsaw Pact ground and air forces opposing NATO, and Soviet forces adjacent to Southwest Asia, have been expanded and "fleshed-out" in terms of logistic support units, transport, and supplies. These forces now seem capable of mounting roughly concurrent offensives against Western Europe and Southwest Asia, or they could attack in one theater while holding the other under immediate threat of attack. Further, if Soviet conventional forces attacked or tied down allied forces in these two critical theaters, North Korea might then take advantage of the situation and launch an offensive with their numerically superior ground and tactical air forces against our ally, the Republic of Korea.

The Soviet Union's greatly improved fleet gives it a capability to conduct an interdiction campaign against our shipping and naval forces in the Atlantic, Indian Ocean, and Northern Pacific. Soviet attack submarines and missile-equipped bombers would constitute the major threat in such a campaign, with missile-equipped bomber aircraft being particularly a threat in the Northern Atlantic, Arabian Sea, and Northern Pacific. While the Pact's overall production of major warships has lagged behind NATO's, both the submarine and naval aviation components of the Soviet Navy's open-ocean interdiction force have been extensively modernized and equipped with improved sensors and weaponry, particularly over the past decade.

The increased size and quality of its armed forces has enabled the Soviet Union to turn from its previous primarily defensive force posture to one that is increasingly structured for offensive use. For example, the Soviets have continued to build far greater numbers of ICBMs than would be necessary for a deterrent capability. Moreover, they have modified the design of these weapons and their launchers so that many of their land-based missiles are now more powerful than our deployed ICBMs. They have developed a refiring capability for some of their larger ICBMs which could allow them to reload their delivery systems several times. They have greatly increased the accuracy of their missiles largely as a result of technologies they have taken from us. They now have the capability to destroy most of our land-based missile forces in a first strike. They have given us indications that they think they could fight a prolonged war by hardening their silos and protecting key targets with elaborate air defenses. Their writings, military doctrine, and exercises all emphasize a nuclear warfighting scenario.

At the same time, Soviet conventional forces have increased their offensive capabilities and developed additional concepts for employment of these forces offensively. Soviet tactical air and missile forces have shifted from their long-standing defensive orientation and are now rapidly acquiring more advanced systems designed to carry out large-scale air offensives. It appears also that Soviet ground force modernization, deployment, and training are oriented toward preparation for more sudden and sustained movements from peacetime locations to objectives well beyond Soviet/Warsaw Pact borders. Soviet naval forces have adopted and implemented new concepts to deny opposing navies use of adjacent seas in support of continental neighbors whom the Soviets might want to cut off from reinforcements.

Failure of the United States and its key allies to keep pace with the Soviet bloc (primarily Soviet) military buildup has not only enabled the Soviet Union to turn to a more offensive force posture, but has also resulted in a shift in the military balance.

### 3. Geographic Expansion of Soviet Military Presence

In assessing the threat posed to U.S. and allied interests, we cannot focus on a comparison of U.S.-Soviet or NATO/Japan-Warsaw Pact forces in a vacuum. We must also take into account the considerable expansion of Soviet influence and presence on the periphery of the Soviet Union and in other areas over the past 20 years.

In the postwar years, the United States attempted to contain the military and political expansion of the Soviet Union by forming a system of alliances on the Soviet periphery. To a certain extent this policy was successful: the Western European nations, Japan and South Korea, and many Pacific nations were free to recover from the ravages of the Second World War.

During the last two decades, however, the policy of containment failed to prevent the Soviet Union from establishing critical footholds in strategic locations throughout the world. Soviet influence and control, together with varying forms of Soviet military presence, spread to country after country, slowly but steadily, in regions that once seemed well outside the containment perimeter. During the 1960s and early 1970s, the Soviet Union exploited political opportunities in the Third World. In exchange for access and basing rights, the Soviets supported radical governments in their efforts to foment regional conflict or suppress their own people. To be sure, this expansion suffered occasional setbacks. Soviet forces were expelled from Egypt and Somalia, and -- of even greater consequence -- the once-close alliance with China was replaced with the Sino-Soviet military confrontation and intense political friction.

Yet over the last decade, the growing capability of Soviet armed forces to project power to great distances helped them sustain and consolidate many new Soviet-bloc military outposts. This geographic expansion of Soviet influence has important military implications. The basing facilities now available to Soviet naval forces, and to naval aviation forces in Cuba, Vietnam, South Yemen, Angola, and elsewhere, would multiply the interdiction capabilities of Soviet forces in any war involving naval combat. Granted, Soviet peacetime use of these bases might not translate automatically to wartime access. But their potential use of these bases in wartime places an added burden on U.S. capabilities.

This expanded access to basing facilities remote from the Soviet periphery also raises new possibilities for longer-range projection of Soviet power. The Soviets have traditionally maintained their marine and airborne forces at high levels of readiness. Since 1972, marine and airborne unit training, equipment, and deployments have also been matched by comparable enhancements to their airlift, sealift, and mobility infrastructure.

The trend of Soviet geographic expansion is especially apparent if one recognizes that most of the Soviet Union's new military outposts are countries that once supported the Western alliance system by providing transit rights or other facilities. In South Yemen, our British allies once had full use of the important port of Aden, which is now a Soviet base; in Ethiopia, the U.S. once had military facilities, and now the Soviets have forces and bases there; in Libya, the U.S. Air Force once had an important base, but now that country is, in effect, a potential forward depot for large amounts of Soviet military equipment. In Vietnam, the former U.S. air and sea facilities at Cam Ranh Bay are now used to extend the reach of Soviet armed forces into southern Asia. Several other nations in which Soviet forces or Soviet-proxy forces now operate were previously free of such military presence.

Central America and the Caribbean are now clearly the target of a concerted Soviet-inspired penetration effort. We recognize, of course, as we did in Europe and Japan just after World War II, that we must promote economic and social development, which will encourage political stability and diminish opportunities for subversion. The President has strengthened that effort with his Caribbean Basin initiative. Nevertheless, we cannot wait for the attainment of all possible social and political improvements in each of these countries. We must address the fact that many countries are now under attack by guerrilla forces that the Soviet Union sustains either directly or through its intermediaries.

If the trend of Soviet expansion we have witnessed over the last 20 years is permitted to continue, the long-term consequences for the United States would be disastrous. The further spread of Soviet military outposts throughout the world would increasingly threaten to cut into the lifelines of the Western alliances and make it even more difficult and costly to defend essential U.S. national interests.

### 4. Other Threats to World Stability

Quite apart from the Soviet Union, the diffusion of technology, industrial strength, and military skills is creating new military powers around the world. For example, new military technology, such as man-portable surface-to-air missiles, is increasingly available to, and sometimes even manufactured in, the less-developed world. The growing ability of the newly industrialized countries to acquire and operate sophisticated weaponry can have a major effect on conflicts outside of the traditional alliance systems. Particularly serious in its potential consequences is the continuing spread of the capabilities and special materials needed to manufacture nuclear weapons. At the same time, the spread of sophisticated weapons to subnational groups increases the threat of terrorism.

Potential conflicts among these military powers, or between them and our allies, would impose unexpected and increasingly difficult demands on both U.S. defense capabilities and diplomacy. Last year's conflict between the United Kingdom and Argentina illustrated the difficulty of maintaining adequate deterrent forces in traditional theaters while key allies are heavily diverted elsewhere. The United States and its allies could encounter similar difficulties were such conflicts suddenly to emerge in different parts of the world. Because of the diffusion of modern military power, effective responses to these challenges could call for more substantial commitments of forces in the future than they have typically required in the past.

The decade of the 1980s is also likely to witness new sources of tension, instability, and conflict both within and among countries of the Third World that could affect U.S. interests. This is of particular concern because many of the strategic resources on which the modern industrial nations have become so dependent are found in Third World nations. Access to those resources could be disrupted by disputes over mineral resources in border areas, offshore oil deposits, and the right to transit inland waterways. Conflicts of this sort are already occurring among some of the countries around the Persian Gulf.

### 5. A Challenge to U.S. National Security Policy

It is important that we develop a responsible and balanced understanding of the real meaning of the threat we face. The detailed facts are clear enough. But there is great resistance to accepting the real meaning of these facts, because to do so is to accept the need for a major sustained response. Confronted as we are by all manner of other real or apparent needs, there is a temptation to argue away even the most overwhelming evidence, with misplaced hope that we can continue as usual, putting off or canceling unpopular military necessities, and increasing our spending on more politically popular domestic programs. Instead, the regrettable fact is that, in view of the threats posed to our national security, this course is no longer open to us.

The gradual shift in the global military balance in favor of the Soviet Union has facilitated, and helped to consolidate, the geographic expansion of Soviet influence and presence in many regions of the world. This expansion of Soviet dominion, in turn, has further strengthened Soviet military power and influence. Because these two fundamental trends are mutually reinforcing, our response is all the more difficult and more urgent. For example, the Soviets' increased ability to project power at a distance made easier their expansion into Afghanistan, South Yemen, and Ethiopia. This, in turn, has provided them with bases and ports strategically located near the world's major trade routes and mineral and energy resources.

If we permit the disparity between the Soviet arms build-up and our military investment to continue, we would be increasingly at a disadvantage in the event of a military confrontation. If we permitted the outflanking of our alliances to continue, not only would military confrontations be more likely, but, should they occur, we would be in a more vulnerable position to deal with them. In designing our strategy to cope with these threats we must not only consider the dangers confronting us today, but also anticipate the dangers we are likely to face in the future.

## C. U.S. DEFENSE STRATEGY

To develop our defense strategy, we must not only heed the dangers that confront us today, but must also recognize the long-term trends -- those in the past that help explain our present policy and forces, and those now emerging for which we must prepare.

In 1945, the United States expressed its hopes for the postwar world by helping to establish the United Nations; rapidly demobilizing our land, air, and naval forces; proposing the Baruch plan for nuclear disarmament; and inviting the Soviet Union to join in the Marshall plan. But the optimism these actions expressed -- optimism that the wartime alliance with the Soviet Union would form the basis for a stable, peaceful future -- quickly dissipated as Stalin's occupying divisions began to shape the Soviet empire in Eastern Europe. The violations of the Yalta and Potsdam agreements through the prevention of free elections in Poland and the destruction of democracy in Czechoslovakia, the Berlin blockade, and the invasion of South Korea destroyed our hopes. We revised our strategy to address these changed circumstances.

Since then, for more than 30 years, America's strategy has shown great continuity: at its center has been the need to contain the Soviet Union and deter it from establishing political and military primacy over friendly nations.

Yet, as the magnitude of Soviet military power has grown, the United States and its allies have found it necessary to adapt the underlying strategy of containment and deterrence to changing -- and increasingly demanding -- circumstances. Thus the elements of change in the evolution of our strategy are no less notable than the elements of continuity.

In the 1950s the United States sought to deter Soviet attack against our European allies with a strategy of "massive retaliation." Especially in the early years of that decade, we relied on our superiority in strategic nuclear forces to offset the manifest conventional military advantage enjoyed by the Soviets. Thus, we sought to deter even a rather limited use of Soviet conventional forces against our allies by threatening to respond massively with nuclear weapons.

The transitory nature of our nuclear advantage became evident with the Soviets' acquisition of a nuclear stockpile and Soviet missile developments. And, as our advantage diminished, the threat to defend against Soviet conventional attack by resorting to the massive use of nuclear weapons became less credible.

In time, the strategy of "massive retaliation" gave way to a new strategy of "flexible response." We would no longer rely exclusively on an ever more doubtful threat to use nuclear weapons in response to a Soviet conventional attack. Beginning in the 1960s, we sought to build toward a conventional capability that would enable us, together with our allies, to respond flexibly to Soviet aggression at all points along the spectrum of violence.

Like the strategy of "massive retaliation," that of "flexible response" was aimed at deterring the Soviet Union from an attack on members of the NATO Alliance. Flexible response involved close coordination of American and allied forces in Europe, plans for rapid U.S. reinforcement of Europe, and a substantial augmentation of U.S. and allied conventional military capabilities.

Our strategy has been successful in Europe -- the Soviet Union has been deterred and peace preserved. Over the years, however, the Soviet Union has expanded the breadth of its military capabilities and influence. Soviet capability to project power has grown, and has been strengthened by their recruitment and use of surrogates for subversion around the world. Accordingly, while a strategy best suited for the center of Europe must be retained, we must now supplement it by developing more effective means to cope with Soviet expansion in the less-developed world.

Our strategy must evolve to respond to the dynamics of our time. While our most basic national interests are enduring, the task of defending them keeps changing as the threat changes. In the near term, strategy must guide our military plans and preparations to protect the peace today. It must also guide the long-term development of our defense plans and posture by anticipating future threats and new opportunities, taking care that today's preferences for weapon systems not prejudge the future evolution of our strategy.

## 1. An Overview of U.S. Defense Strategy

Our strategy consists of a series of discrete, but interrelated elements, some of which have endured for many years, others of which are more recent in origin. It incorporates three main principles:

- First, our strategy is *defensive*. It excludes the possibility that the United States would initiate a war or launch a pre-emptive strike against the forces or territories of other nations.

- Second, our strategy is to deter war. The *deterrent* nature of our strategy is closely related to our *defensive* stance. We maintain a nuclear and conventional force posture designed to convince any potential adversary that the cost of aggression would be too high to justify an attack.

- Third, should deterrence fail, our strategy is to *restore peace on favorable terms*. In responding to an enemy attack, we must defeat the attack and achieve our national objectives while limiting -- to the extent possible and practicable -- the scope of the conflict. We would seek to deny the enemy his political and military goals and to counterattack with sufficient strength to terminate hostilities at the lowest possible level of damage to the United States and its allies.

To achieve a successful defensive and deterrent strategy we have emphasized three vital supporting policies. First, the United States remains part of, and contributes to, *a collective defense posture that incorporates the strength of our allies*. The North Atlantic Treaty, the Rio Treaty, the ANZUS Treaty, and our treaties with Korea, the Philippines, and Japan help provide for an effective common defense against external aggression. Second, to buttress our collective security posture, we maintain *forward deployments* that, combined with the forces of our allies, *provide the first line* of conventional defense in Western Europe, Japan, and Korea. In the event of war, we would reinforce these forward-deployed units, using forces capable of rapid deployment over long distances. Third, we seek a *flexible force structure* that builds upon our alliance commitments and forward deployments and provides us a variety of options with which to respond in a timely fashion to unforeseen contingencies in any region in which we have vital interests to defend.

Needless to say, no brief summary can do justice to a strategy whose complexity necessarily reflects our worldwide interests and commitments. The following pages expand upon these major elements of our strategy, illustrating the relationship of that strategy to the programs necessary to implement it.

## 2. The Principles of Strategy

### a. The Defensive Orientation

Our strategy excludes the possibility that the United States would initiate war. The United States would use its military strength only in response to aggression, not to pre-empt it. Once an aggressor has initiated an attack, however, the principle of non-aggression would not impose a purely defensive strategy in fighting back. This principle has governed American strategy since at least the beginning of this century.

Given our defensive orientation, we inevitably cede several advantages to a potential aggressor. He will have the choice of time, place, and method of attack. He can have a detailed plan for his operations, designed to culminate in a politically decisive outcome. Since we will be on the defensive initially, we may suffer the disadvantage of surprise, with all the attendant difficulties of carrying out a response coordinated with our allies. The aggressor may attempt the destruction of our forces and quick seizure of critical territory, so as to present us with a fait accompli.

The defensive orientation of our strategy imposes several requirements on our military posture: our forces must be maintained in a high state of readiness; our command, control, communications, and intelligence capabilities must be flexible and enduring so as to improve our warning and response to an attack; and our reserve forces must have the capability to mobilize rapidly.

To implement the defensive orientation of U.S. strategy, the Reagan Administration gave readiness improvements high priority. The budget allocations in FY 1981 and FY 1982 have gone a long way to remedy the serious deficiencies that previously existed in manning, training, spare parts, and other components of our force readiness.

### b. Deterrence

Despite the change in threat and consequent evolution of U.S. strategy over the past four decades, the objective of deterring the outbreak of war has remained the key principle of U.S. military strategy.

The commitment to deterrence and defense is neither easy nor inexpensive. When it confronts an opposing coercive "offensive" strategy, it requires continued vigilance to maintain [illegible] When deterrence succeeds, it is easy to attribute the maintenance of peace, not to the contribution of the defense that enforces the deterrent, but to a host of more facile assumptions -- some imagined new-found "peaceful intent" of the opponent, the spirit of detente, growing economic interdependency, and so forth. When deterrence fails, however, and the opponent has deliberately weighed the risks and still decided to attack, the dividends of a viable warfighting defense are unquestionable. But unless such a defense is acquired, is in being, and is maintained at the ready, it is too late to try to regain it after a war starts.

For deterrence to be effective, several things are necessary:

-- First, our forces must demonstrate that they could survive a first strike with sufficient strength to threaten losses that would outweigh any gains a potential adversary might expect from an attack.

-- Second, our threatened response to the attack must be credible, that is, of such a nature that the potential aggressor believes we would carry it out.

-- Third, the boundary between peace and aggression must be sharp and clear. Formal treaties and agreements between allies serve an important function of clearly defining those limits.

It is also important to recognize that while deterrence can avert a deliberate decision to attack, it cannot prevent all forms of conflict. For example, deterrence alone cannot prevent our adversaries from using ambiguous forms of aggression, such as subversion, or from distorting or concealing the origins of a conflict. Deterrence cannot prevent an unintended or accidental outbreak of hostilities. That is why President Reagan has proposed a series of confidence-building measures to reduce the possibility of miscalculation.

To deter Soviet strategic nuclear attack, we are modernizing and strengthening all three legs of the United States Triad, and improving our strategic command and control systems; to deter a Warsaw Pact attack in Europe we, in conjunction with our Allies, are modernizing the NATO triad -- U.S. central strategic systems, non-strategic nuclear forces, and our general purpose land, air, and naval forces; to deter conflict in other areas where U.S. vital interests are involved, we are improving our ability to deploy rapidly our general purpose forces to the point where those interests could be threatened.

In the post-war era, nuclear deterrence has played a particularly dominant role. When the United States had a nuclear monopoly and the Soviet Union had conventional superiority, our nuclear weapons served as a deterrent to Soviet expansion into Western Europe. Once the Soviet Union began testing and deploying limited numbers of nuclear weapons, U.S. nuclear forces served as a deterrent to both Soviet conventional and nuclear attack.

But the sustained Soviet buildup has changed all this over the past decade. The Soviets have acquired a margin of nuclear superiority in most important categories, while still maintaining superiority in their conventional forces. Consequently, for the United States to have a strong and credible deterrent capability, we must strengthen both our nuclear and conventional force posture as quickly as possible.

### c. Restoring the Peace

Should deterrence fail, we must be able to halt the attack and to restore the peace. In employing military force to restore the peace, the Reagan Administration seeks to limit the scope, duration, and intensity of conflict.

In seeking to limit the scope of the conflict, our objective would be to deny enemy war aims in the theater in which the attack occurred. However, we must recognize that the Soviet Union has enough active forces and reserves to conduct simultaneous campaigns in more than one theater. As a result, we must understand that war could spread to other regions. Access to overseas combat theaters will be a critical factor in denying enemy war aims. Consequently, the Reagan Administration has sought and will allocate resources to provide us with sufficient naval power and air and sealift capability to assure our success in a single or multitheater conflict.

Also, we must recognize that, in a conventional war in a region like Southwest Asia, the geographic limits of combat cannot be taken for granted. For example, the requirements for maritime access to that region may well require us to respond to naval attacks not necessarily limited to the geographical boundaries of that theater.

We seek to limit the duration of conflict. However, given the Soviet Union's increased ability to sustain a prolonged war, we would be imprudent to prejudge the duration of such a U.S.-Soviet conflict. Preparing only for a "short war" would not only weaken the credibility of our deterrent, it would also be imprudent because it would limit the ability of U.S. military forces to restore the peace should deterrence fail. Therefore, the Reagan Administration has allocated resources to improve the sustainability of U.S. forces and has initiated programs to provide for a more rapid expansion of defense production during an emergency, all as part of our effort to maintain a credible deterrent in the face of increasing Soviet capabilities.

We also seek to limit the intensity of conflict. We have therefore undertaken a series of initiatives to improve our ability to end a conventional war in a way that would not only safeguard our national interests and those of our allies, but would also greatly reduce the possibility of nuclear escalation. We are exploring with our NATO allies ways to take full advantage of new techniques and technologies to improve conventional defense.

To achieve these aims requires strong conventional forces. In fact, by far the major part of our defense budget is expended on maintaining and improving our conventional forces. We are upgrading the capability of the Army's combat units by acquiring the Abrams tank, the Bradley fighting vehicle, the Apache and Blackhawk helicopters, and the Patriot air defense system. We are expanding our naval forces, especially those that provide us with force projection capability -- the carrier battle group, the battleships, and the amphibious ships. We are continuing to modernize the Air Force's aircraft inventory with F-15s and F-16s, while increasing the number of tactical wings in the force. With the continued support of the Congress for the Administration's defense program, the nation's conventional capabilities will be dramatically improved within this decade.

We recognize, however, the necessity to husband our limited resources. Therefore, in planning for the possibility that war cannot be deterred, we must concentrate our military preparations on those contingencies that are most threatening to the national interest of the U.S. and our allies. Of course, we cannot neglect, or be unprepared for, a wide range of lesser threats.

## 3. Supporting Policies

### a. Alliances for Collective Defense

The United States continues to place great emphasis on collective security; and the contributions and requirements of our alliance systems remain a fundamental aspect of U.S. strategy. The United States maintains long-standing commitments to the common defense in both the conventional and nuclear spheres.

As in the past, Western Europe remains a most vital region for U.S. security interests. Moreover, deterring Soviet aggression outside of Europe will depend in large measure on the cohesiveness of the Atlantic Alliance. Correspondingly, U.S. and Allied strength and determination in other regions affect the security of NATO. Assured Western access to critical raw materials and energy resources in Africa and the Middle East, secure transit through the North and South Atlantic Oceans and the Caribbean, and confidence that Asian nations will participate in countering Soviet global ambitions are supportive of continued European security. While our allies can and must contribute to meeting these common security requirements, we recognize that the U.S. possesses certain unique capabilities -- diplomatic, economic, and military -- necessary to their successful fulfillment.

We are pursuing a long-term program, including prepositioning of equipment (POMCUS) and reliance on host nation support (HNS), designed to provide more realistic and reliable ways for the United States to meet its NATO commitments. Increases in readiness, sustainability, and mobility improve the prospects for a successful forward defense based on conventional arms. The President's program for long-term improvements in strategic nuclear forces, together with the NATO decision on intermediate-range nuclear missiles, will enhance and preserve the essential U.S. nuclear guarantee for the Alliance.

To enable certain friendly nations to defend themselves, we have requested substantial increases in security assistance compared with the levels of assistance provided by the previous Administration. We believe that a carefully designed expansion of security assistance will encourage improvements in the forces of allies and friendly nations whose economies could not support the acquisition of the necessary armaments. In addition, our assistance for expanding the military infrastructure in certain vital regions will allow U.S. and allied forces to complement each other more efficiently. Against some critical threats, a strategically spent dollar for security assistance can produce a much larger return than that same dollar spent for our own forces.

### b. Forward-Deployed Forces

For the Atlantic Alliance, and for the bilateral security treaties with the Republic of Korea, the Philippines, and Japan, deterrence of aggression is strengthened by the strategy of forward defense. To that end, we deploy ground and air forces in Europe, Japan, and Korea, and naval carrier battle groups and amphibious forces in the Western Pacific, the Mediterranean Sea, and the Indian Ocean.

The proximity of Soviet forces to our allies imposes severe demands on the timeliness of a response, since territory once lost would be difficult to regain. The forward deployment of our forces makes them immediately available for combat in coalition with our allies, it permits integration with allied forces in peacetime, and it represents a visible manifestation of the U.S. commitment to the common defense. In essence, forward deployment gives unmistakable credibility as well as increased capability to the participation of the United States in the defense of allied territory.

The strength of our conventional deterrent posture is enhanced by the integration of allied command structures in NATO and Korea, by the U.S.-based strategic reserve of general purpose forces, and by periodic exercises which demonstrate our rapid deployment capability and help to coordinate U.S. and allied forces. For these reasons, forward deployment has been a consistent and substantial component of our deterrent strategy for more than three decades.

### c. Providing Flexibility

It would be a grave mistake for our strategy to focus only on what seemed the most dangerous threats, or the most plausible ones. Our armed forces need to be prepared for a wide spectrum of contingencies. History teaches that it is often the unanticipated conflict, or aggression in unanticipated places, that poses the most difficult challenges. Who would have thought a year ago that the United Kingdom would have to marshal major maritime forces to fight a conflict near Antarctica?

In structuring our forces, it is important to recognize that the United States must be prepared to cope with threats across the entire spectrum of conflict:

-- First, we need to support our allies and friends against the coercive threat of unused military strength, the "shadow" of military power that can be used implicitly or explicitly to intimidate.

-- Second, we must be able to cope with acts of terrorism, and provide assistance against insurgent attacks on the political and economic institutions of friendly countries that are designed to destroy the functioning of a government and to frustrate democratic development.

-- Third, our armed forces, together with those of our allies, must be prepared and equipped to deter or, if need be, defeat armed attack using conventional weapons.

-- Fourth, of course, we must deter nuclear attack.

The Reagan Administration recognizes the increased need to respond to threats at the lower end of the spectrum and to conduct peacekeeping operations. Our revitalization program includes important force structure increases, including steps to reverse a decade of neglect of our Special Operations Forces (SOF). We also plan major improvements in the readiness of existing forces, and a series of enhancements in the command and control of these forces. Nonetheless, we recognize that a great deal remains to be done to rebuild and maintain the needed capability.

Another critical element of a flexible force structure is mobility. The new Soviet outposts in many regions of the world make it possible for the Soviet Union to interfere with or threaten friendly nations, either directly or through its surrogates, in regions where we have no shield of land-based forward deployment. Even in areas where we do have forward deployments, airlift and sealift forces are essential to our ability to reinforce our units, and to sustain them.

The effects of the global spread of Soviet military outposts are aggravated by the improved Soviet capabilities for projecting power, particularly with respect to regions close to the Soviet Union. For example, in the Persian Gulf region, the Soviet military now has a new, encircling ring of bases (or facilities) in Ethiopia, Aden, and Afghanistan. In addition, the reach of Soviet airlift forces and the Backfire bomber permit the Soviets to project military power to every part of the Middle East, to critical regions of the Pacific, and elsewhere.

Events in Iran since the fall of the Shah and the Soviet invasion of Afghanistan have rendered previous U.S. plans and assumptions for Southwest Asia obsolete. They were based upon the presence of a very supportive government in Iran. Clearly, the massive changes in the geostrategic situation there demand that we add to our forces for that theater, and improve our prepositioning support facilities and ability to move forces into the region quickly. One step in this direction is the creation of the new U.S. Central Command.

The Reagan Administration has therefore accelerated the effort to improve support facilities and access arrangements for deploying U.S. forces there and elsewhere. We have already nearly tripled the amount of maritime prepositioning we inherited at Diego Garcia, and have begun converting eight fast cargo ships (SL-7s) to roll-on/roll-off configuration for movement of forces based in the United States. These sealift improvements, coupled with the purchase of 50 more C-5 and 44 more KC-10 wide-bodied aircraft proposed by this Administration, will increase our deployment rate to Southwest Asia or other distant theaters significantly. Other improvements in our capability to defend vital U.S. interests include major improvements of facilities to which our forces have access (provided that Congress grants approval); a gradual strengthening of Army logistics units needed to support rapid deployment forces in the many highly demanding climates and terrains where they may have to operate; and a fifteen-fold increase in the level of our rapidly deployable medical support capability.

Another important element of a flexible force structure is the capability to respond to different types of warning. For example, if we are to make use of intelligence warnings of enemy attack, we must increase our options for prudent and effective responses. Our previous lack of flexibility, which focused on a fixed hypothetical timetable outlined below, has tended to aggravate the effects of the previous low state of readiness of our forces. Assumptions about the earliness of warning we would receive, or its unequivocal character, or the speed with which such warning would be followed by the political decisions to respond, must not be unrealistically specific, providing enemy planners with dangerous opportunities to mask preparations for attack by deception and disinformation measures.

For example, many of the preparations for reinforcing our forces in Europe have long been based too exclusively on a rigid timetable that assumed a certain period of advance warning, prompt political decisions to initiate the reinforcement, and sufficient days before the outbreak of hostilities to complete reinforcements. For some of the most likely contingencies, however, this timetable would not be realistic. Therefore, we have initiated a NATO study and follow-up measures to ensure that our planning recognizes that warning is usually ambiguous, and that this would probably impede the difficult political decision to assemble and move large forces. For regions other than Europe we also need effective responses to ambiguous warning -- responses whose costs and consequences make it acceptable to carry them out repeatedly, if necessary.

There is a direct correlation between the ability to respond to ambiguous warning and force readiness. If a potential enemy perceives that our defenses are ready -- that we have forward-deployed forces in a high state of readiness and have made effective preparations for reinforcement -- he would, if bent upon an attack in any event, recognize the need to mobilize stronger forces before attacking. That effort would provide us with better opportunities to obtain warning signals and to alert our own forces so as to further increase their readiness.

### 4. Building Toward Long-Term Improvement

In addition to keeping the peace today, our strategy must also look to the future. It must promote long-term initiatives that will contribute to a fundamental improvement of our nation's security in the years to come. Much as our military strategy must be supportive of our foreign policy, our foreign policy must help with the task that our defense effort seeks to accomplish. As President Reagan has said:

> The Soviet Union faces serious economic problems. But we, and I mean all of the nations of the free world, have helped the Soviets avoid some hard economic choices by providing preferential terms of trade, by allowing them to acquire militarily relevant technology, and by providing them a market for their energy resources even though this creates an excessive dependence on them. By giving such preferential treatment, we have added to our own problems -- creating a situation where we have to spend more money on our defense to keep up with Soviet capabilities which we helped create. Since taking office, I have emphasized to our allies the importance of our economic, as well as our political, relationship with the Soviet Union.

We must work vigorously with our allies to forge an effective, united policy that will discontinue subsidizing the Soviet war machine by the Western democracies.

Our longer-term strategy must also look beyond the present arms confrontation with the Soviet Union to the challenges of the future. Industrialization will continue to expand throughout the world and, with it, the ability to produce more advanced weaponry. The ability to manufacture nuclear explosives could no doubt be within reach of more nations than it is today. With few exceptions, the "nuclear-capable" countries have so far chosen to forgo the effort and accompanying risks that would occur were they to transform this latent capability into the actual manufacture of nuclear weapons. Nonetheless, we cannot safely assume that this trend will necessarily continue or that other countries, as they become nuclear-capable, will also refrain from developing nuclear weapons. Our efforts to prevent, control, and cope with the spread of nuclear weapons deserve high priority both now and in the future.

During the past two decades, we had high hopes for the contribution that arms control would make to our security. We have since been sadly disappointed, particularly by recent evidence of Soviet violation of two major arms control agreements governing chemical and biological weapons. Although these violations add to the realization of the immense difficulties we are facing in our quest for genuine and verifiable agreements, President Reagan is determined to press ahead in our search for genuine arms control, which must mean arms reduction, and not empty formulas that permit expansion of arms.

Success in arms reduction depends, however, on a sustained commitment to improving our force posture. Strengthening our defenses will not only provide the Soviet Union with incentives necessary to reach meaningful agreements, but it will also improve our ability to deter war. To implement the Reagan Administration's defense strategy, we have designed a comprehensive program to improve the readiness and sustainability of our conventional forces and to modernize our conventional and nuclear forces.

## D. CONVENTIONAL CAPABILITIES REQUIRED TO IMPLEMENT OUR MILITARY STRATEGY

Our military strategy requires strong conventional forces, able to help deter attack on ourselves and our principal allies and to help defeat an attack, should deterrence fail.

In the European theater, our strategy is one of collective defense. To implement that strategy, European nations provide a majority of the forces. The U.S. contribution provides for sufficient in-place ground and air units in Europe to deal with immediately available Warsaw Pact forces, and substantial reinforcing units to contain follow-on Pact forces. In NATO's Center Region, the United States augments European and Canadian contributions with four in-place Army divisions and seven Air Force fighter wings. Our objective is to provide six reinforcing Army divisions and 20 Air Force tactical fighter wings within ten days of a decision to deploy. On NATO's flanks, forces from the nations involved would have principal responsibility for conducting a defense, but would be supported by forces from the U.S. and other allied nations.

Our objective in the Persian Gulf area is to help those states maintain their independence and territorial integrity, to preserve Western access to Persian Gulf oil, and to assist in the forward defense of NATO's flanks. Our strategy is to be prepared to insert sufficient forces rapidly enough to deter a Soviet invasion of the region. To implement that strategy, we must have combat-ready forces and the means to move them quickly to the region. We must also be able to maintain maritime forces in the Gulf and Arabian Sea. We must also help Israel maintain the strength of its military forces and at the same time do everything we can to help secure the execution of the President's Middle East peace initiatives.

To implement our strategy in the Northwest Pacific, we rely principally on the self-defense effort of our allies to meet regional security requirements. In addition, the U.S. maintains forward-deployed forces in Korea (one Army division and limited tactical air forces) and in Japan (one Marine amphibious force, tactical air forces, and one homeported carrier). Our ability to deploy reinforcements in the Northwest Pacific, as well as in Europe and Southwest Asia, will be improved by the additional airlift and sealift capabilities planned in the Reagan Administration's defense program. The nature of the threats to regional security demands that our allies, particularly Japan, devote the resources necessary to carry out their self-defense roles.

Our naval force requirements are potentially worldwide, because, in conjunction with our allies, we must be able to defend the sea lines of communication along which critical U.S. reinforcements and resupply travel to forward theaters. We must also be able to conduct offensive operations against enemy naval forces and facilities, should that be required after attacks are launched by them.

In order to meet commitments for the forward deployment of naval naval forces with existing and planned resources, while maintaining personnel and fleet readiness, we have adopted a policy of "flexible operations." We continue to emphasize deployments to those areas where we have always maintained significant naval forces (the Mediterranean, the Western Pacific -- and, more recently, the Indian Ocean). But in addition we will conduct preplanned operations in other areas as circumstances warrant, thus improving both the training for our fleet and our ability to deal with fast-breaking events.

Unfortunately, the limited defense budgets of the last decade left us with serious deficiencies in our conventional force posture and in our ability to meet the requirements outlined above. Moreover, the conventional force plans we inherited for the next decade were inadequate for the rebuilding task we confronted. The FY 1982 budget and associated five-year plan of the previous Administration was not only inadequate, but was also grossly underfunded and could not have been carried out as planned. A host of much-needed modernization programs had been stretched in order to fit within the fiscal constraints imposed on defense. Many procurement programs were budgeted at extremely inefficient rates, and some production lines were even scheduled for temporary shutdown, to be followed by a costly restart in later years. Weapon development programs had also been stretched, often delaying scheduled deployment dates by years. Funding for operations and maintenance likewise had declined to levels that were insufficient to support our planned forces at reasonable tempos of operation. Finally, military compensation had fallen far behind private sector pay levels, threatening to weaken seriously the all-volunteer force.

1. Readiness

In correcting these inherited deficiencies, we must strike a careful balance between the need to make long-term improvements in our defense posture and strategy, and the need to be prepared to deter aggression in the immediate future. Should deterrence fail, our armed forces must be able to fight immediately. If we have -- and are perceived to have -- this capability, deterrence will be strengthened, making aggression less likely. Therefore, our highest priority is to improve the readiness of our existing forces.

When this Administration took office, we found that the prolonged period of inadequate defense budgets had led to a cumulative underfunding of those elements that determine the readiness of our armed forces -- adequate manning and training, maintenance, supplies of spare parts, and ammunition. We immediately recommended to the Congress, and received, substantial increases in the funds devoted to the readiness of our forces. Readiness funding was increased by $3 billion for FY 1981 and by $9 billion for FY 1982. Total readiness funding, defined in the broadest sense to include materiel readiness, manpower, facilities, and other support, increased in real terms (constant FY 1983 dollars) by 8.9% in FY 1981, by 9.1% in FY 1982, and will continue to grow in FY 1983 and FY 1984. We made similar requests to increase funding for peacetime materiel readiness (including equipment maintenance and modification, spares, force operations, and other logistic support). We requested from Congress and received increases of 14.5% in FY 1981 and 14.1% in FY 1982, and funding for materiel readiness will be further increased in FY 1983 and FY 1984. As we make real progress toward achieving our first priority of improving readiness, we can also reduce the rate of funding increases for this priority.

Qualified personnel are another essential element of readiness. Upon entering office, we found the U.S. ability to attract and retain qualified men and women had suffered severely because of past military pay practices. Not only were our service members being called upon to make difficult sacrifices in pay, but the other benefits available to them -- cost-of-living allowances for personnel stationed overseas, for example, and compensation for duty-related travel -- had failed to keep pace with rising costs. As a result, we were faced with declining recruiting rates for the high-quality people we needed and an alarming exodus of our more competent and experienced personnel. In FY 1980, for example, only 55% of all eligible service members chose to reenlist -- and our experienced technical personnel were leaving at even higher rates.

Therefore, compensation improvements for our military personnel were one of the principal elements in our requests for the FY 1981 Supplemental and the FY 1982 Budget Amendment. This additional funding allowed an average 14.3% pay raise for military personnel in FY 1982.

Today we have a force that is more fully manned with higher-caliber men and women. During the past year, all of the Services met or exceeded their recruiting objectives, and 86% of our non-prior-service recruits were high school graduates, up from 68% in FY 1980. Retention showed similar gains, with almost 70% of all eligible personnel choosing to reenlist in FY 1982, compared to only 55% two years earlier. Indeed, the revitalization of our all-volunteer force is one of the earliest and best successes of the Reagan defense program, a reflection not just of better pay and benefits, but also of recognition by our servicemen and women that it is once again an honor to wear a uniform.

It is this success that makes it feasible to ask our military personnel to join all other recipients of government payment in a common sacrifice by forgoing the annual cost-of-living pay raise in FY 1984. By doing so they contribute along with all other government employees and beneficiaries to the important national goal of reducing near-term budget deficits.

We know that this may cause recruiting and retention to suffer. Our analytical models tell us this may be the case. If recruiting and retention become adversely affected to the point that the readiness of our forces will suffer, I will immediately seek to increase military pay to offset that effect. In any event, I will seek to repay this sacrifice to our military with a catch-up pay raise in the FY 1985 budget. The Administration remains fully committed to fair and equitable military pay that will, in the long run, be competitive with pay levels in the private sector.

The FY 1981 Supplemental and FY 1982 Budget Amendment requests also permitted us to acquire a wide variety of equipment and supplies that could be deployed quickly. Examples include ammunition and spare parts, new camouflage uniforms and gear, trucks and other vehicles, chemical-protection clothing, and medical equipment. These items will be entering the inventory over the next year.

As a result of our efforts, the readiness of our forces has already improved across the board. The number of fully or substantially ready major active units has increased by almost one-third during the term of this Administration. The Air Force tactical fighter and attack force has increased its proportion of "mission-capable" aircraft from 62% in FY 1980 to 66% in FY 1982. Navy ship and aircraft readiness is also improving. The number of ships considered "command-operationally ready" grew significantly from

November 1980 to 1982, while naval aviation squadron readiness showed a similar pattern of improvement.

We are also realizing good results from major maintenance activities. For example, the Navy is progressing with new procedures for efficient ship overhaul and maintenance. By performing some additional work during brief in-port periods between deployments, the Navy is significantly extending the interval between major overhauls.

If we are to take advantage of the equipment and people in the force, training is essential; and we are making important improvements here as well. For example, the aircrews for Air Force tactical fighter and attack aircraft will average about 20 hours' training per month in FY 1984, compared to an average of just over 17 hours per month in FY 1982 and only 13 hours per month in FY 1978. We consider that a force-wide average of 20 hours is close to satisfactory (although the actual rate achieved will vary by aircraft type, mission assigned, and other factors). If peacetime training is to be effective, we must simulate a realistic combat environment. To do so, we are installing modern instrumentation and support equipment on our training ranges. The National Training Center at Fort Irwin, California, is but one example of a much-needed capability for conducting realistic, large-scale, two-sided combat training exercises.

Finally, the history of warfare has shown us that the nation that can most rapidly generate its military power, bring it to bear effectively, and then fully sustain it, stands the best chance of winning. Credible deterrence or successful war prosecution is therefore inextricably linked to the readiness of not only our Active, but also our Reserve Component forces. Adequately manned, equipped, and trained Reserve Component units are important to the revitalization of our conventional might. We have taken steps to raise the readiness of our Reserve Components so that we can now plan to include reserve units -- combat, combat support, and combat service support -- in our earliest deloyments.

### 2. Sustainability

Another major problem inherited from the last decade was the deterioration in sustainability -- the ability of our forces to continue fighting in the event of a prolonged conventional war. Stocks of spare parts and munitions had been at precariously low levels for years. The dangers of this situation became all the more apparent as evidence mounted of the Warsaw Pact's ability to conduct high-intensity, non-nuclear warfare beyond the first weeks of combat.

Therefore, in addition to budgeting for improvements in readiness, we also had to increase the sustainability of our forces. Sustainability depends on replacement equipment, spare parts, ammunition, fuel, and other essential consumables; but it also requires manpower to maintain combat strength in the course of a campaign.

We have come to grips with the dangerous deficiencies we inherited in the level of stocks of supplies and ammunition needed to sustain our forces in combat. During the past two years, we have taken the first steps toward a goal of matching the Soviets' ability to conduct sustained combat. Our FY 1982 Budget Amendment contained $3 billion in additional funding for these accounts, representing roughly a 30% increase over the Carter Administration's FY 1982 request for sustainability funding. The FY 1983 budget continued that emphasis, requesting 50% more funding, in real terms, than the previous Administration had planned. Thanks largely to these increases, the number of days of munitions supply in 1983 will be about 10% higher than under the plan of the previous Administration and supplies of spares and other consumables will also be greater.

The FY 1984 budget contains about $12 billion to support major sustainability improvements. When the materiel funded by the FY 1984 budget is delivered -- about two years after it is funded -- we will have increased our ability to sustain combat by about 25% over the level we inherited.

### 3. Modernization

When this Administration took office, we found that the capability of our conventional forces to adapt to the demands of modern warfare had been badly neglected, calling into doubt our ability to protect critical U.S. interests around the world now and in the future. An independent estimate indicated that our defense "capital stock" -- the value of all our equipment and supplies on hand -- had fallen by one-sixth during the decade of the 1970s. Many of our combat units suffered from severe equipment shortfalls -- in armored personnel carriers, aircraft, and ships -- or were equipped with obsolete hardware. The Joint Chiefs of Staff and other authorities warned of a "hollow" Army, a shrinking Navy, and an aging Air Force. Our deteriorating equipment situation was compounded by the Soviet Union's emphasis on building greater numbers of increasingly more capable modern weapons.

During the past two years we have taken steps to reverse that trend, and we are beginning to see more, and newer, equipment come into our forces. During our first year in office, we moved promptly to restore funding for several needed systems that would, in effect, have been terminated under the plan of the previous Administration, including the Army's M88 recovery vehicle, the Air Force's KC-10 aircraft, and the Navy's amphibious lift ships. We also found it necessary to increase funding for several other procurement programs that had been budgeted at low and inefficient (and thus more expensive) rates: the Army's M-1 tank and AH-64 attack helicopter, the Navy's EA-6B and F-14 aircraft, and the Air Force's F-15 aircraft.

We have begun to procure additional quantities of weapon systems and support equipment for our ground forces, which were particularly hard hit by the diversion of resources in the 1960s and by the spending cuts of the 1970s. For example, the Army has embarked on the most extensive modernization and equipping effort in its history. Compared to the last plan of the Carter Administration, ground forces will get about 50% more Bradley fighting vehicles and 25% more attack helicopters, to cite only two cogent examples. Although these procurement plans will not expand Army force levels, they will go a long way toward eradicating the most serious of the Army's equipment problems.

We have also placed heavy emphasis on bolstering the capabilities of our sea- and land-based tactical air forces. These forces are an integral component of our forward defense strategy, providing a means to react flexibly to ambiguous warning, deploy rapidly to distant regions, and deliver considerable firepower in support of outnumbered ground forces. They have an ability to respond rapidly across a combat theater to sudden changes in the ground battle situation, further enhancing the flexibility of our forces. To ensure the continued effectiveness of our sea- and land-based tactical air forces in the face of the growing Soviet threat, we found it necessary both to accelerate the pace of previous modernization plans and to make a modest increase in force levels. Compared to the previous Administration's projections, our modernization program will procure approximately 60% more tactical aircraft during the next five years. This will permit about a 15% increase in the Air Force's fighter attack aircraft inventory, while reducing the average age of our force below the previously planned levels. We have also provided for about a 10% increase in Navy and Marine corps fighter/attack forces, while reducing the average age of the aircraft inventories by more than half a year from the planned level. Thus, our program will not only accommodate a modest force expansion but, equally important, will prevent a disturbing increase in the age of our air forces.

We have likewise taken major steps to modernize and expand our strategic mobility capability -- adding to our airlift and sealift forces, and prepositioning more equipment and supplies abroad. These improvements are aimed at providing a credible capability to meet our widespread overseas commitments. One of our major initiatives has been a decision to increase our outsized strategic airlift capability by procuring additional C-5 aircraft. Other initiatives include programs to provide fast sealift capabilities through the acquisition and conversion of SL-7 fast container ships, and to expand maritime prepositioning levels through the construction and conversion of maritime prepositioning ships (TAKX).

The most significant force expansion we propose centers on the Navy. We requested in the FY 1983 budget -- and the Congress has now voted -- funds for two new nuclear-powered carriers, which will allow us to replace aging MIDWAY-class carriers by the early 1990s. By ordering the two new carriers together, we can save $750 million from what they would have cost us separately, and we can expect delivery about two years sooner. Without these additions, for which the Carter Administration had no plan, the Navy could not have sustained a force any larger than the 12 deployable carrier battle groups we inherited.

Our plans will also more than double the previous Administration's planned production rate for attack submarines, permitting both the replacement of aging vessels and a small force increase.

We have also developed a plan and committed the necessary funding for a program to modernize our amphibious fleet. Without this additional ship procurement, our capability to lift amphibious forces would actually have started to decline in the early 1990s. Our program gives us a good start toward countering the block obsolescence problem that threatens our amphibious lift shipping in the next decade.

These initiatives have put us back on the road to restoring our conventional force strength by modernizing our non-nuclear general purpose forces -- ground, naval, and air. Because of the need to maintain a balance in overall capability, however,the pace of our procurement effort must necessarily be slower than would otherwise be desirable, given the substantial demands our military forces must be prepared to meet in the near term. But modernization also means making better use of what we have to adapt to current and future threats. Product improvement, fitting older platforms with new munitions, and advancing the most promising technologies are all important aspects of building a force that is truly modern, as opposed to just being "new."

## 4. Role of New Technology in Modernization

To ensure that we get the best return from our scarce modernization dollars, we must exploit all the cost-effective technology available to us. Today, we and our allies stand at the threshold of substantial improvements in the capabilities of our conventional forces and weapon systems -- if we can develop weapons that prove reliable in "real world" conditions, and if we can develop innovative tactics to take advantage of new or improved technology.

The various technologies have not all reached equal levels of maturity, so the actual improvement in capabilities is likely to be gradual. To make progress during this decade, therefore, we must overcome the penchant to forgo the acquisition of currently available capabilities in search of even better technological advances in the distant future.

Much remains to be done in the realm of modernization, especially in regard to ordnance in the broadest sense of the term -- that is to say, the "payloads" (the missiles, bombs, and ammunition) that ultimately justify our investment in the "platforms" (the aircraft, ships, and tanks available now). Although the failure to procure modern ordnance resulted largely from the extremely tight budgets of the 1970s, there may also have been an institutional bias favoring the acquisition of "platforms" at the expense of ordnance. To promote a more rapid adaptation and fielding of modern ordnance, two senior-level units have been set up in the Office of the Secretary of Defense to work actively with the Services.

Improved types of munitions can bring movable and mobile targets under more effective attack at extended ranges. Area-distributed submunition warheads under development can provide improved capabilities for attacking discrete targets such as personnel, trucks and other light vehicles, armored tracked vehicles, surface-to-air missile sites, and mobile command posts. In addition, a number of area-distributed mines are becoming available for use in restricting the enemy's maneuver or channeling his movement.

While we may be able to field an increasing number of weapons with these unguided submunitions within the decade, we must also continue to explore technologies using standoff target acquisition sensors and autonomous guidance capabilities. Together with the development of specially designed conventional warheads, this could permit the early targeting of important chokepoints along an enemy's line of communications, such as bridges, tunnels, and railheads. Such interdiction can lead to the bunching up of major forces, creating more vulnerable targets for area-coverage munitions, and disrupting the enemy's timetable for his advance. At the same time, we may be able to improve our ability to attack mobile targets with new sensors that can locate and identify targets at significantly greater distances (100km or more).

Our strategy for coping with future developments in conventional warfare, however, must not rely on technical means alone. We must seek to encourage our combat personnel to take the initiative in developing new concepts to employ our forces as skillfully as possible. We are developing improved procedures for cooperation between land-based airborne warning and surveillance systems and land-based fighter aircraft and naval forces. In addition, we seek to strengthen our cooperation with allied and friendly forces.

## 5. Recent Military Events and Our Defense Program

The conflict in the South Atlantic between the United Kingdom and Argentina, and the recent combat in Lebanon, could have some significant implications for defense policy and the defense program. A number of lessons have begun to emerge from our examination of these conflicts.

One larger lesson of the war in the Falklands should not be lost. We have been taught again that an adequate deterrent is far less costly than the war the failure to deter might cause.

The British had stationed very small forces in the South Atlantic for a number of years, including an ice-patrol ship with limited military capability. The events of 1982 showed that these force levels, while perhaps adequate to deter low-level incidents, were insufficient to deter full-scale invasions. From hindsight, it is now recognized that an adequate deterrent would have been far less expensive -- even if kept up for decades -- than the war caused by the failure to deter. It goes without saying that the value of the human lives saved by successfully deterring conflict is incalculable.

In addition to this broader policy lesson, several lessons for military tactics and weapon systems begin to emerge from the recent conflicts in the South Atlantic and in Lebanon.

Human Factors -- The military success of the Israelis in Lebanon and the British in the Falklands must be accounted for on a much broader basis than just equipment performance. The Israelis and the British prevailed because of the quality of their manpower and leadership at all levels; through their thorough planning, superior training, and high-quality intelligence capabilities; and through their ability to conduct coordinated and cohesive combined operations.

We believe the results of the South Atlantic and Lebanon fighting confirm our emphasis on high peacetime activity levels (e.g., flying hours and steaming days) and realistic training. In contrast, the Soviets and their allies operate at well below the U.S. activity level. We believe we retain potential critical advantages over the Warsaw Pact in these areas.

The importance, too, of the morale and motivation of individual combatants cannot be overestimated. Many examples remind us of the central nature of the human element in combat. They suggest that no matter how modern the technology, the most important single factor for the future, as it always has been in the past, is the men and women who will bear the brunt of the action, their training, the strength of their leaders, and the morale of the nation they defend.

Early Warning of Air Attack -- The battles in the South Atlantic and in Lebanon proved the importance of early warning of air attack. The British lacked such warning and were forced to use picket ships in a defense warning role. Of the six ships that the United Kingdom lost, several were lost as a direct result of their picket duties.

Israel's use of airborne early warning aircraft contributed significantly to its spectacular successes against Syrian air defenses.

Logistics -- Few factors affect the outcome of combat quite as dramatically as the ability to move forces into the battle area and to sustain them once engaged. Although the Israelis were not troubled by the long supply lines with which the British had to contend, both nations used far more war consumables -- food, fuel, tires, ammunition -- than they had planned. Argentina, too, was fighting at the limits of the combat radius of its fighter aircraft and had to resupply troops under difficult conditions. At least part of the British success resulted from the ability to requisition (or charter), convert as necessary, crew, and load over 50 merchant ships in a very short time. We must ensure that the U.S. has a similar maritime support capability.

Weapons Performance and Tactics -- These limited conflicts demonstrated the decisive effectiveness of high-technology weapons. The success of the Israeli Air Force in defeating Syrian MiG-21s and MiG-23s with F-15s and F-16s, and the performance of the AIM-9 series of air-to-air missiles in both conflicts, has confirmed the design concepts of these systems. The British also demonstrated the flexibility of V/STOL aircraft in combat as the FRS-1 Sea Harriers and GR-3 Ground Attack Harriers flew over 1,300 sorties and had an availability rate of 80 to 90%.

Equally striking is the importance of real-time reconnaissance capabilities in support of combat operations. The Israelis, for example, using remotely piloted vehicles to spoof and photograph Syrian SAM concentrations and to provide real-time intelligence, succeeded in destroying most Syrian SAM sites. We hope to improve our SAM suppression capabilities through greater understanding of such tactics.

Arms Transfer and Proliferation of Technology -- The apparent success of many high-technology weapons in both conflicts can be expected to heighten the demand for such arms in less-industrialized countries. This could result in more situations in which combatants face one another with the same weapons, or it could create situations in which we and our allies face Soviet as well as Western weaponry. For example, in the South Atlantic, the Exocet, SeaCat, SeaDart, and Blowpipe missiles, as well as some infantry weapons, were used by both the British and the Argentine forces.

A Note of Caution -- In looking at the conflicts in the South Atlantic and in Lebanon, we must recognize that the scale of conflict, weapon technology, training of combatants, and force employment concepts will in all likelihood not be replicated at another time and place. We are particularly conscious of the fact that the battle in the South Atlantic did not resemble at all what our NATO navies would have to expect from the more sophisticated Soviet threat. Similarly, in Lebanon, although the Syrians possessed much modern equipment, they were neither equipped, trained, nor led as well as we would expect Warsaw Pact troops to be in a Central European conflict. For these reasons we have exercised caution in drawing lessons for our defense policies and programs.

## E. THE ROLE OF NUCLEAR WEAPONS IN STRATEGY

### 1. A Viable Deterrence Policy: Lessening Dependence on Nuclear Weapons

In the wake of World War II, the United States and the Western democracies developed a policy intended to prevent any recurrence of the tremendous carnage and devastation which the war had caused. To that end, the United States made clear that it would use its atomic weapons not for conquest or coercion, but for discouraging -- for deterring -- aggression and attack against ourselves and our allies.

Today, deterrence remains -- as it has for the past 37 years -- the cornerstone of our strategic nuclear policy. To deter successfully, we must be able -- and must be seen to be able -- to respond to any potential aggression in such a manner that the costs we will exact will substantially exceed any gains the aggressor might hope to achieve. We, for our part, are under no illusions about the dangers of a nuclear war between the major powers; we believe that neither side could win such a war. But this recognition on our part is not sufficient to prevent the outbreak of nuclear war; it is essential that the Soviet leadership understand this as well. We must make sure that the Soviet leadership, in calculating the risks of aggression, recognizes that because of our retaliatory capability, there can be no circumstance in which it could benefit by beginning a nuclear war at any level or of any duration. If the Soviets recognize that our forces can and will deny them their objectives at whatever level of nuclear conflict they contemplate, and in addition that such a conflict could lead to the destruction of those political, military, and economic assets that they value most highly, then deterrence is effective and the risk of war diminished. It is this outcome we seek to achieve.

### 2. The Evolution of U.S. Nuclear Policy

During the late 1940s and early 1950s, America's virtual monopoly of intercontinental nuclear systems meant that our requirements for conventional war were relatively small. The Soviet Union understood that under our policy of "massive retaliation," we might respond to a Soviet conventional attack on the U.S. or our allies with an atomic attack on the USSR. As the 1950s ended, however, the Soviets began developing and acquiring long-range nuclear capabilities. As their capacity for nuclear and conventional attack continued to grow, the U.S. threat to respond to a conventional, or even a limited nuclear, attack with massive nuclear retaliation became less and less credible; hence, it was not a stable deterrent. Accordingly, in the 1960s the U.S. and the NATO allies adopted the concept of "flexible response". This concept had two goals: first, U.S. nuclear planning was modified in order to provide the President with the option of using nuclear forces selectively (rather than massively), thereby restoring credibility and stability to our nuclear deterrent. Additionally, the United States and the allies hoped that by improving conventional forces, they would reduce reliance on nuclear weapons to deter or cope with non-nuclear attack. Unfortunately, neither we nor our allies ever fully met this key goal. Thus, with our present effort to increase our conventional strength, the Reagan Administration is essentially trying to secure a long-established but elusive goal of American policy.

The greater urgency with which we have approached this long-standing policy goal stems from two incontrovertible facts. First, despite the improved conventional force posture that the flexible response doctrine prompted NATO to undertake, the Alliance has continued to rely heavily on a nuclear response. Second, the Warsaw Pact has meanwhile strengthened its non-nuclear as well as its nuclear forces to a far greater extent than has NATO, even after "flexible response" was accepted as our doctrine.

Even if we ignored the direct and indirect role of nuclear forces in deterring conventional offense (for example, by compelling the dispersal of the enemy's forces and thus reducing their effectiveness), the United States would still have to maintain nuclear forces to deter nuclear attack on itself. We must also deter nuclear attack on our allies, most of whom have no nuclear weapons of their own.

While we work toward ensuring deterrence, we need to think about and plan against possible failures of deterrence. If deterrence should fail, we cannot predict the nature of a Soviet nuclear strike nor assure with any certainty that what may have started out as a limited Soviet attack would remain confined at that level. Nevertheless, we must plan for flexibility in our forces and in our response options so that there will be the possibility of terminating the conflict and re-establishing deterrence at the lowest possible level of violence, thus avoiding further destruction.

Of course, this concept of seeking to enhance deterrence and to limit the level of destruction by having flexible and enduring forces is not new. It has been squarely in the mainstream of American strategic thinking for over two decades. Appendix A contains excerpts from Annual Defense Reports over the past 20 years that demonstrate clearly the continuity in the doctrine of "flexible response."

The past decades have taught us two central lessons with regard to implementing our nuclear policy, lessons that we must continue to take into account in the years ahead:

-- First, for our retaliatory threat to be seen as credible, we must be able -- and be seen to have the means -- to respond appropriately to a wide range of aggressive actions. If our threatened response is perceived as inadequate or contrary to our national interest, it will be judged to be a bluff;

-- Second, deterrence is a dynamic effort, not a static one. In order to continue to deter successfully, our capabilities must change as the threat changes.

It is useful to recall how the nuclear forces have changed over time:

By the early 1960s, the U.S. had over 7,000 strategic nuclear weapons, most of which were carried by B-47s and the then-new B-52s. The Soviet Union had fewer than 500 strategic warheads. Throughout the 1960s, our nuclear posture presented the Soviet Union with a compelling deterrent if it considered launching a nuclear strike against the United States: because of the relatively small number of weapons the Soviet Union possessed and their ineffectiveness against any U.S. strategic forces, such an attack was impossible to execute successfully. If the Soviet planner targeted our missile silos and alert bomber bases with the systems he then possessed, he found that he would deplete his nuclear arsenal while not significantly reducing U.S. retaliatory forces. In other words, his ability to limit the certain, massive retaliatory destruction of his own forces and assets was rather small. If, on the other hand, the Soviet planner targeted U.S. cities, he would have to expect a U.S. retaliatory strike against his own cities, a strike by a U.S. arsenal considerably larger and much more capable than his own, by any measure. Again, he was deterred.

During the course of the 1970s the Soviet arsenal grew both in quantity and in quality (although the U.S. qualitative edge remained). The Soviets expanded their land-based missile force and hardened their protective silos, and continued the improvement of their defenses against air attack. At the same time, the United States made a choice to restrict its improvements to the yield and accuracy of its own missile forces so as not to threaten the Soviet Union with a sudden, disarming first strike. The net result of this was to allow the Soviet Union a "sanctuary" for its ICBM force, since U.S. forces by now could not attack them effectively. The Soviets, however, did not follow our self-imposed restraint. They developed a new generation of ICBMs specifically designed to destroy U.S. missile silos, which were hardened far less than Soviet silos, and the B-52 bases. By the late 1970s, this combination of vulnerable U.S. missiles and a Soviet missile "sanctuary" had reduced the effectiveness of our earlier deterrent and eased the problems of the Soviet war planners. Now, the Soviets could envision a potential nuclear confrontation in which they would threaten to destroy a very large part of our force in a first strike, while retaining overwhelming nuclear force to deter any retaliation we could carry out.

Keeping our strategic missiles and bombers adequately protected in the face of changing enemy offensive and defensive capabilities has, therefore, required continuing adaptation, as was recognized in practice by previous Administrations. For example, previous Presidents and Secretaries of Defense began programs to equip the B-52 with cruise missiles to aid in the problem of penetrating the increasingly formidable Soviet air defenses. This Administration, recognizing that an improved penetration capability is vital to the bomber leg of the Triad, reversed the previous Administration's decision to cancel the B-1, and successfully urged the Congress to authorize the B-1B bomber, which will be able to penetrate Soviet air defenses after the B-52 cannot. We are also pursuing development of a Stealth Bomber, which will be even more effective long after the useful life of the B-1B.

The B-1B will be able to escape from its bases quickly and so be far less vulnerable to destruction on the ground than the B-52. It will also be able to penetrate the vastly improved Soviet air defenses, which soon will be able to deny reliable penetration to the B-52s. The Stealth bomber should be able to continue this penetration even more effectively and for a far longer period.

To take advantage of the current ability of the sea-based leg of the Triad, our submarine systems, to elude attack, we will be deploying the Trident II submarine-launched ballistic missile and the Tomahawk sea-launched cruise missile. The Trident II will give us both increased payload and improved accuracy, substantially strengthening the sea-based portion of our nuclear forces. The deployment of cruise missiles on selected attack submarines and selected surface forces will add to the strategic reserve force, further diversifying our strategic capabilities.

The Minuteman and the Titan II land-based missiles were designed in the 1950s and installed in the 1960s, an era when our fixed missile bases, hardened by the standards of 20 years ago, were relatively safe from attack by the imprecise Soviet ballistic missiles of the time. Today, our ground-based missiles are the most vulnerable of our retaliatory forces, and we have decided to phase out the Titan II. Four Presidents, six Secretaries of Defense, and a majority of Members in many sessions of Congress have reached the conclusion that an MX missile should be deployed to modernize our ICBM force. Because of the newly developed accuracy of the Soviet missiles, largely gained by technologies they have acquired legally and illegally from us, all have had difficulty achieving the necessary consensus on a reasonably survivable mode of basing the MX ICBM. In its last session, the Congress agreed to provide R&D funds and to reserve the decision on providing production money until a basing mode has been approved.

Protecting a command, control, and communications system for nuclear forces is particularly difficult. Yet stability of deterrence in a crisis and the effective and responsible use of our nuclear forces depend on it. The Reagan Administration has therefore given highest priority to increasing the ability of our strategic force management systems not only to survive but to remain capable of performing their basic functions throughout a sustained sequence of Soviet attacks. We are also improving the performance, coverage, and endurance of our warning and attack assessment systems. These improvements, together with the strengthening of air defenses, should help remove any misperceptions in the mind of Soviet leaders that the United States could not retaliate effectively after a Soviet nuclear attack.

We cannot overemphasize the importance of a multiplicity of survivable strategic forces. Over the last 20 years, we have maintained a Triad of land-based ICBMs, manned bombers, and submarine-launched ballistic missiles as an effective means of preserving a stable deterrent. The unique characteristics of the independent and separate strategic components that make up the Triad bolster deterrence by acting in concert to complicate severely Soviet attack planning, making it more difficult, on the one hand, for them to plan and execute a successful attack on all these components and, on the other hand, to defend against their combined and complementary retaliatory effects. The Triad also acts as a hedge against a possible technological breakthrough that the Soviets might develop or obtain that could threaten the viability of any single strategic system. The importance of the Triad to deterrence is no more apparent than today, when each leg is in need of modernization.

### 3. Nuclear Weapons Issues

What has been said so far illustrates the complexity of the continuing task of maintaining an American nuclear force capable of surviving a Soviet attack that is aimed at destroying it. However, the maintenance of a persuasive capability to deter a Soviet nuclear attack directed solely at an ally is even more demanding. It should be most obvious in this connection that we need to be able to use force responsibly and discriminately, in a manner appropriate to the nature of a nuclear attack.

Yet, some believe that we must threaten explicitly, even solely, the mass destruction of civilians on the adversary side, thus inviting a corresponding destruction of civilian populations on our side, and that such a posture will achieve stability in deterrence. This is incorrect. Such a threat is neither moral nor prudent. The Reagan Administration's policy is that under no circumstances may such weapons be used deliberately for the purpose of destroying populations.

For this reason, we disagree with those who hold that deterrence should be based on nuclear weapons designed to destroy cities rather than military targets. Deliberately designing weapons aimed at populations is neither necessary nor sufficient for deterrence. If we are forced to retaliate and can only respond by destroying population centers, we invite the destruction of our own population. Such a deterrent strategy is hardly likely to carry conviction as a deterrent, particularly as a deterrent to nuclear -- let alone conventional -- attack on an ally.

To maintain a sound deterrent, we must make clear to our adversary that we would decisively and effectively answer his attack. To talk of actions that the U.S. Government could not, in good conscience, and in prudence, undertake tends to defeat the goal of deterrence.

Some of the same ambiguities cloud recent proposals that we abandon long-standing alliance policy and pledge "No First Use" of nuclear weapons in response to Soviet conventional attacks in Europe. Indeed, if the Soviets thought that we would be so constrained, they might mass forces more heavily for offensive actions and gain a unilateral conventional advantage. To reduce further the prospects of nuclear war, we must strengthen NATO's conventional forces -- not exchange unenforceable and unverifiable pledges. The danger of a "No First Use" pledge remains that it could increase the chances of war and thus increase the chances of nuclear conflict.

### a. A Prudent Approach to Nuclear Weapons

If we are to maintain a responsible nuclear deterrent against nuclear attacks on our allies, as well as against nuclear attacks on the United States, we will need to continue to exploit our comparative advantage in technology. The movement for a nuclear freeze has been inspired in part by the mistaken belief that the United States has been steadily piling up more and more nuclear weapons. In fact, the United States has not been accumulating more weapons. The number in our stockpile was one-third higher in 1967 than in 1980. Nor have we been accumulating more destructive weapons. The average number of kilotons per weapon has declined since the late 1950s, and the total number of megatons in our stockpile was four times as high in 1960 than in 1980. With the retirement of the Titans, this total will decline even further. Moreover, the United States has had an intensive and consistent program to improve the safety of the nuclear weapons in its stockpile against accidental detonation and its consequences, as well as to improve the security of these weapons against seizure and use by terrorists or other unauthorized persons. The weapons in our stockpile today have an average age of about 13 years. It is essential that we continue to replace them with new, safer, more secure, and less vulnerable weapons.

The various proposals for a nuclear freeze would prevent us from carrying out these programs and thus improving the safety and the security of our weapons, reducing the vulnerability of our delivery systems in the face of increasing threats, and replacing systems as they reach the end of their service life due simply to their age. Such proposals, hence, would reduce the stability of our deterrent against both "accidents" and deliberate destruction.

### b. Linkage Between "Strategic" and "Non-Strategic" Nuclear Forces

To enhance deterrence of Soviet conventional and nuclear attack against our NATO allies, we have for many years stationed substantial nuclear forces in Europe. Many of the delivery systems are equipped with dual-capable systems, which can use both conventional and -- with proper authorization from the President and in consultation with the allies -- nuclear weapons. These forces deter by providing both a significant combat potential (thereby denying potential Soviet hopes of a quick victory) and a clear linkage of the American strategic nuclear systems, which are NATO's ultimate deterrent force, to the defense of Europe.

The purpose of our non-strategic nuclear forces in Europe is to deter Soviet nuclear and major conventional attack on our NATO allies. This deterrence is founded on NATO's ability to retaliate against the Soviet Union from Europe, and on a clear Soviet understanding of the certainty that a conventional/nuclear war in Europe risks engagement of the central nuclear systems of the United States. All of our nuclear forces are governed by a single coherent policy that governs the linkage among our conventional, non-strategic nuclear, and strategic nuclear forces. There is no separate U.S. policy for non-strategic nuclear weapons.

In the past five years, Soviet deployments of SS-20 missiles targeted on Europe have posed a grave threat to the credibility of NATO's deterrent posture in the context of the overall Soviet force buildup. The SS-20 missile force, along with other Soviet intermediate-range nuclear forces that can reach Europe, but not the United States, could give the Soviet Union meaningful coercive power in peace or in a crisis, and preclude the Alliance from achieving its objectives in the event of war.

Over the past decades the Soviet Union has sought, through both propaganda and diplomacy, to shatter the strategic unity of the NATO Alliance. A primary purpose of this effort has been to force the removal of U.S. forces, nuclear and conventional, from Europe. This would leave our European allies exposed to threats by forces of the Soviet Union, both those based in Eastern Europe and those based on Soviet territory; it would also break the linkage between the U.S. strategic deterrent force and the defense of the European members of NATO. In fact, the purpose of the close relationship between U.S. "strategic" forces and the U.S. nuclear forces deployed in Europe is to dissuade the Soviets from believing that they might be able to conduct a nuclear war in Europe from a sanctuary in the USSR.

One of the principal ploys used by the Soviet leadership in its propaganda campaign is turning facts on their head and asserting that the U.S. intends to fight a "limited nuclear war" in Europe. Nothing could be further from the truth. We recognize that the use of any nuclear weapon -- whether "tactical" or intercontinental -- would represent a most fundamental change in the nature of warfare.

The very purpose of our effort to strengthen conventional forces is to prevent a situation in which it would become necessary to use nuclear weapons to stop a conventional attack. If it is clear to the Soviet Union that a conventional assault by them cannot produce a victory, either through a quick campaign or by outlasting NATO in a conventional conflict they would try to prolong, then no rational Soviet planner would launch such an assault in the first place. But we cannot allow our security to rest entirely on the calculations of a Soviet planner as to whether he can successfully attack and invade NATO Europe with his conventional military power. As a result, in addition to our conventional modernization and sustainability programs, the nuclear option remains an important element in deterring Soviet attack. If the Soviet leadership is aware that NATO, if attacked, will employ, if required, all means necessary to defend itself and prevent the USSR from achieving its war aims, then deterrence is strengthened and the chances of both conventional and nuclear war are reduced.

### c. Nuclear Arms Control

It is the objective of the United States to maintain the lowest level of armaments compatible with the preservation of our, and our allies', security. While President Reagan is forced by the Soviet threat to pursue a force augmentation and modernization program, he has also undertaken a serious effort designed to reduce armaments through negotiation. In the nuclear area, the Reagan Administration took two important new arms control initiatives, on intermediate-range and strategic nuclear forces.

On intermediate-range missiles, President Reagan offered to terminate our plan to deploy ground-based cruise missiles and the Pershing II ballistic missile, if the Soviets would eliminate their SS-20, SS-4, and SS-5 missiles. In START (Strategic Arms Reduction Talks), the President proposed first-phase reductions in the most destabilizing nuclear weapons -- ballistic missiles -- by seeking ballistic missile warhead reductions to equal ceilings about one-third below current levels, and by reducing ballistic missiles to about one-half the current level. To enhance stability, he proposed that no more than one-half of those warheads be on land-based ballistic missiles. He also announced that we would seek equal ceilings on other elements of strategic nuclear forces in a second phase, including limits on aggregate ballistic missile throw-weight below current American levels. Since the Intermediate-Range Nuclear Forces (INF) and START negotiations began, the President has offered additional proposals for confidence-building measures, which aim primarily at reducing the risk that misinterpretation of the other side's activities could heighten tensions or even lead to conflict.

In seeking INF and START agreements that significantly limit nuclear arms, we will not repeat the mistakes of past negotiations. Our experience with the effects of some previous arms control agreements has not been positive. They had the effect of limiting our own forces while enabling the Soviets to continue a massive arms build-up. Despite the SALT accords, the Soviet Union has steadily increased its nuclear arsenal, making our missile forces much more vulnerable and our deterrent capability less stable and secure.

We need to emphasize that this Administration is not developing the Peacekeeper (MX) or any other weapon as a "bargaining chip." In its current loose usage, the term "bargaining chip" weapon has come to mean a weapon that is developed -- often at great cost -- for the sole purpose of then negotiating away that very weapon. That, obviously, would be an absurd procedure.

What is true, however, is that arms control negotiations must reflect the balance of power, including the forthcoming power obtainable from weapons under development. To the extent that we do make progress in modernizing our forces, the Soviet Union has a stronger incentive to negotiate in good faith, and we thus have a better opportunity to reach agreement on the control of arms. If, as we desire, the outcome of such negotiations is an outright reduction in arms, then it might be said that we build some newer weapons only to be able to withdraw more older weapons. But that is not at all the same thing as to build costly new weapons as expendable bargaining chips. Rather, we seek to have the proper mix of modern forces to ensure a stable deterrence at reduced levels and permit arms control to complement and enhance national security.

We can never, much as we would desire it, return to the kind of world that existed before the secrets of the atom were unlocked. But we can work to ensure that nuclear weapons are never used, by maintaining the forces necessary to convince any adversary that the cost of aggression would be far higher than any possible benefit. The United States has pursued this strategy of deterrence since the dawn of the nuclear age; and since that time deterrence has preserved the peace.

The primacy of deterrence has not changed, but the conditions for ensuring it have. The Reagan Administration's strategic modernization program is designed to preserve deterrence, in the face of an evolving threat, by increasing the survivability, accuracy, and credibility of our nuclear forces, and to offer the Soviet Union an incentive for genuine arms reduction, by demonstrating our commitment to maintaining a strategic balance.

## A. THE DEFENSE BUDGET

### 1. Introduction

The President's FY 1984 defense budget reflects our continued commitment to maintaining and enhancing the current operating forces of the military and to ensuring this Nation's future security. It has been developed based on an honest and realistic reassessment of our existing and long-term military capabilities in the face of a growing threat. The costs are stated clearly. It is economically productive and provides for a controlled growth rate. The management initiatives undertaken during the first two years of this Administration to ensure the efficient execution of defense plans and programs are continued and considerably strengthened. The achievement and maintenance of improved levels of readiness and sustainability continue to receive a high priority. Force modernization and expansion programs are planned to meet the ever-present and growing Soviet challenge.

This budget, shown in Table II.A.1, proposes Total Obligational Authority (TOA) of $274.1 billion for FY 1984. The tables in Appendix B provide budget data by appropriation title and by mission area in current and constant FY 1984 dollars. The chapters in Part III of this report provide details on specific programs.

TABLE II.A.1

Department of Defense - Military Functions
($ Billions)

| | FY 1982 | FY 1983 | FY 1984 |
|---|---|---|---|
| Current Year Dollars | | | |
| Total Obligational Authority (TOA)1/ | 211.4 | 240.5 | 274.1 |
| Budget Authority (BA) 2/ | 213.8 | 239.4 | 273.4 |
| Outlays 3/ | 182.9 | 208.9 | 238.6 |
| Constant FY 1984 Dollars | | | |
| Total Obligational Authority (TOA) | 229.2 | 249.3 | 274.1 |
| Budget Authority (BA) | 231.8 | 248.2 | 273.4 |
| Outlays | 197.6 | 216.4 | 238.6 |

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1/ TOA represents the value of the direct defense program for each fiscal year, regardless of the sources of financing, which could include balances available from prior years, budget authority, or resources available from sale of inventory items.

2/ BA represents the authorization to incur new obligations, that is, to hire personnel or enter into contracts involving expenditures of funds from the Treasury within a specified period of time. In most cases, budget authority is provided by appropriation, but there are some exceptions. Budget authority may be available for obligation for one or several years, as specified by Congress.

3/ Outlays represent expenditures or net checks issued. Less than three-quarters of FY 1984 outlays will result from FY 1984 budget authority; the remainder will come from budget authority provided in FY 1983 and earlier years. Funds obligated in a given year may not become outlays until later years.

This request represents an increase of $33.6 billion over FY 1983. About 25% of the increase will go to pay for inflation -- a significant component of any program cost growth. The remaining 75% of the increase will provide a balanced approach to the already established goals for strategic force modernization, readiness and sustainability, airlift and sealift enhancement, and tactical force expansion.

Operating costs represent about 52% of the DoD budget in FY 1984. This category includes our payments to military and civilian personnel and military retirees as well as allocations for maintenance and repair of equipment and for utilities, medical costs, training, petroleum and lubricants, and spare parts.

The remainder of the budget largely represents funds for investment in research and development, procurement of weapon systems, and military construction and family housing. These are the programs that suffered the most neglect following the end of the Vietnam war. Throughout the decade of the 1970s, the cumulative decline in DoD investment was more than 30% in real terms.

### 2. Budget Trends

Defense budgets have fluctuated significantly over time. Charts II.A.1 and II.A.2 present the trends in TOA and outlays from FY 1964 to FY 1984. In current dollars, TOA moved up sharply between FY 1965 and FY 1968 due to the war in Vietnam. This level was maintained until FY 1974, when inflation and program increases caused a modest upturn that accelerated in FY 1981.

Chart II.A.2, the constant dollar trend chart, shows quite a different picture. From the FY 1968 Vietnam peak, constant-dollar TOA declined throughout the 1970s except for a brief upturn in FY 1976 and FY 1977. The turnaround began in FY 1980 and increased appreciably from FY 1981 to FY 1984, reflecting the Administration's commitment to the revitalization of our military strength. The FY 1980-84 period marks the only time in more than 30 years that defense constant-dollar TOA has increased for more than three consecutive years.

Chart II.A.3 compares total federal outlays and DoD outlays for the last three decades. This chart presents very dramatically the shift that has occurred in the composition of the federal budget away from defense and toward non-defense activities.

Table II.A.2 shows the DoD and non-DoD shares of the federal budget as well as their relationship to the GNP for the same period. As can be seen, not only has the defense share of the total budget declined, but defense demands on the GNP have also dropped -- from the 9% level in the 1950s to a projected 6.5% in FY 1983. At the same time, the federal non-defense share of the GNP has nearly doubled.

(U) Defense shares of selected economic aggregates, displayed in Table II.A.3, reflect the same trends.

Chart II.A.1

## DEPARTMENT OF DEFENSE BUDGET TRENDS

(CURRENT $)

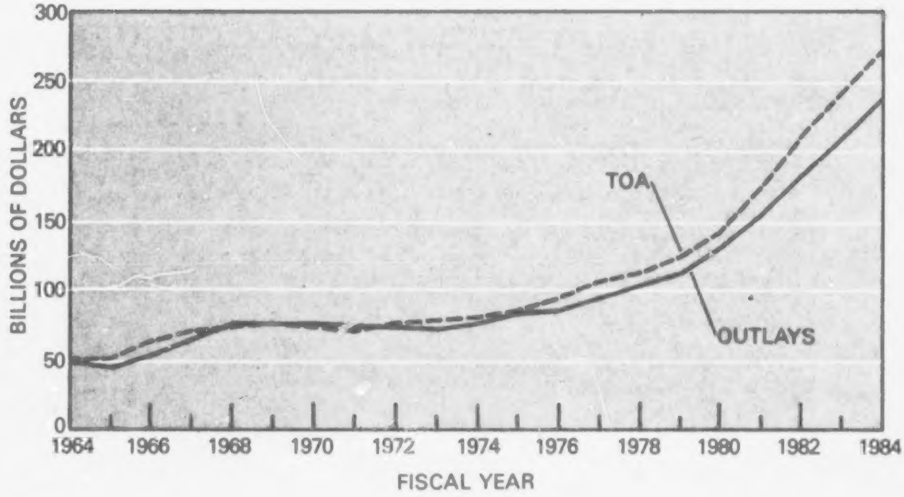


Chart II.A.2

## DEPARTMENT OF DEFENSE BUDGET TRENDS

(CONSTANT $)

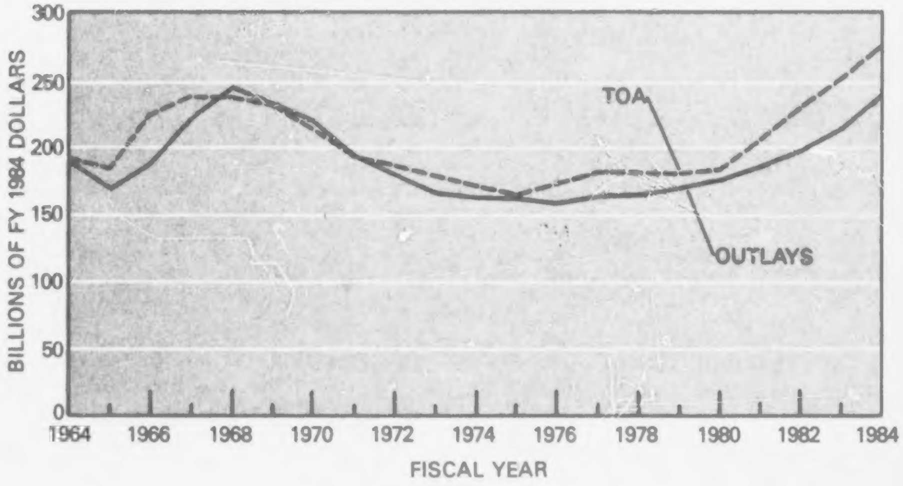
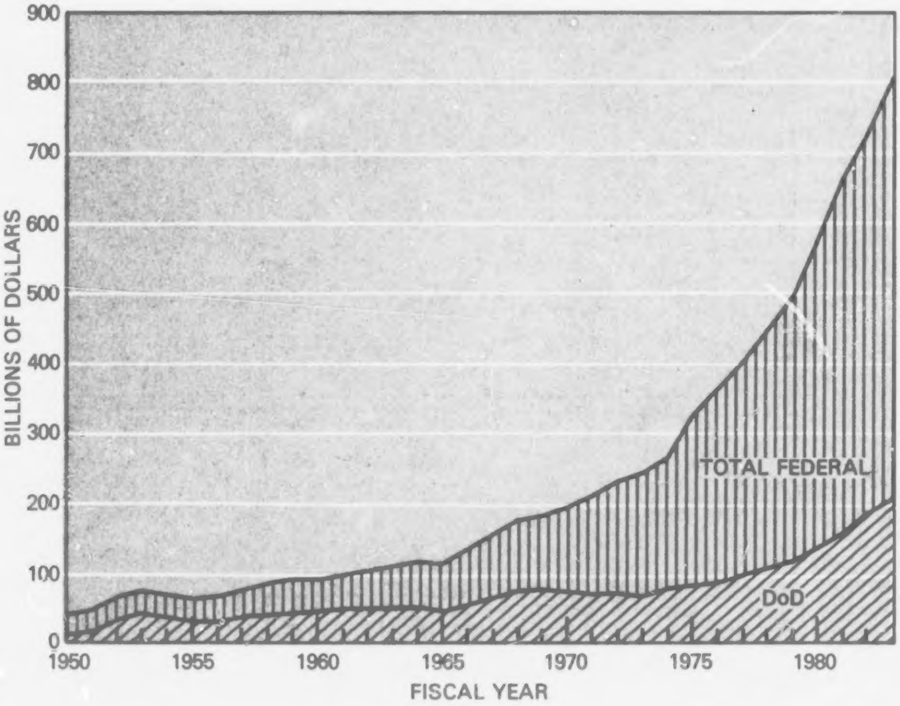


Chart II.A.3

## DoD AND TOTAL FEDERAL OUTLAYS

(CURRENT $)



## TABLE II.A.2

### Federal Budget Trends

| Fiscal Year | Federal Budget as % of GNP | DoD Budget as a % of Federal Budget | DoD Budget as % of GNP | Non-DoD Budget as % of Federal Budget | Non-DoD Budget as % of GNP | DoD Budget as % of Net Public Spending 1/ |
|---|---|---|---|---|---|---|
| 1950 | 16.1 | 27.4 | 4.4 | 72.6 | 11.7 | 18.5 |
| 1955 | 18.0 | 51.3 | 9.2 | 48.7 | 8.8 | 35.5 |
| 1960 | 18.5 | 45.0 | 8.3 | 55.0 | 10.2 | 30.3 |
| 1965 | 18.0 | 38.7 | 7.0 | 61.3 | 11.0 | 25.2 |
| 1970 | 20.2 | 39.4 | 8.0 | 60.6 | 12.2 | 25.4 |
| 1971 | 20.4 | 35.4 | 7.2 | 64.6 | 13.2 | 22.4 |
| 1972 | 20.4 | 32.6 | 6.7 | 67.4 | 13.8 | 20.7 |
| 1973 | 19.6 | 29.8 | 5.9 | 70.2 | 13.8 | 19.0 |
| 1974 | 19.4 | 29.0 | 5.6 | 71.0 | 13.8 | 18.3 |
| 1975 | 21.9 | 26.2 | 5.7 | 73.8 | 16.2 | 16.8 |
| 1976 | 22.2 | 24.1 | 5.4 | 75.9 | 16.9 | 15.6 |
| 1977 | 21.5 | 23.9 | 5.1 | 76.1 | 16.4 | 15.8 |
| 1978 | 21.4 | 23.0 | 4.9 | 77.0 | 16.5 | 15.4 |
| 1979 | 20.8 | 23.4 | 4.9 | 76.6 | 16.0 | 15.6 |
| 1980 | 22.4 | 23.0 | 5.2 | 77.0 | 17.3 | 15.6 |
| 1981 | 22.9 | 23.8 | 5.4 | 76.2 | 17.5 | 16.1 |
| 1982 | 24.0 | 25.1 | 6.0 | 74.9 | 18.0 | 16.9 |
| 1983 | 25.2 | 25.9 | 6.5 | 74.1 | 18.9 | 17.2 |

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1/ Federal, state, and local net spending excluding government enterprises (such as the postal service and public utilities) except for any support these activities receive from tax funds.

## TABLE II.A.3

## Defense Shares of Economic Aggregates

| Fiscal Year | DoD as a Percentage of Public Employment | | DoD as a Percentage of National Labor Force | | National Income Accounts Percentage of Total Purchase | | |
|---|---|---|---|---|---|---|---|
| | Federal | Federal, State & Local | Direct Hire (DoD) | Including Industry | National Defense 1/ | Total Federal | State & Local |
| 1965 | 71.3 | 29.3 | 5.0 | 7.8 | 7.3 | 9.8 | 10.3 |
| 1966 | 73.0 | 30.6 | 5.6 | 9.0 | 7.5 | 10.0 | 10.4 |
| 1967 | 74.1 | 31.5 | 6.0 | 10.0 | 8.6 | 11.1 | 10.9 |
| 1968 | 74.0 | 31.3 | 6.1 | 10.0 | 9.0 | 11.4 | 11.4 |
| 1969 | 73.2 | 30.1 | 5.9 | 9.4 | 8.4 | 10.8 | 11.7 |
| 1970 | 72.3 | 27.7 | 5.3 | 8.1 | 7.8 | 10.0 | 12.1 |
| 1971 | 68.3 | 24.4 | 4.6 | 7.0 | 7.0 | 9.2 | 12.6 |
| 1972 | 66.0 | 21.9 | 3.9 | 6.2 | 6.5 | 8.9 | 12.8 |
| 1973 | 65.0 | 20.7 | 3.7 | 5.8 | 5.9 | 8.1 | 12.8 |
| 1974 | 63.8 | 19.7 | 3.5 | 5.5 | 5.3 | 7.8 | 13.0 |
| 1975 | 62.9 | 18.7 | 3.4 | 5.3 | 5.4 | 8.0 | 13.8 |
| 1976 | 62.5 | 18.1 | 3.3 | 5.0 | 5.2 | 7.6 | 13.8 |
| 1977 | 62.5 | 17.6 | 3.2 | 5.0 | 4.9 | 7.5 | 13.1 |
| 1978 | 61.9 | 17.3 | 3.1 | 4.8 | 4.7 | 7.2 | 13.0 |
| 1979 | 61.0 | 16.8 | 2.9 | 4.8 | 4.6 | 7.0 | 12.7 |
| 1980 | 61.3 | 16.7 | 2.8 | 4.7 | 4.9 | 7.4 | 12.9 |
| 1981 | 66.7 | 17.3 | 2.8 | 4.9 | 5.1 | 7.6 | 12.6 |
| 1982 | 64.4 | 17.4 | 2.8 | 5.1 | 5.7 | 8.3 | 12.7 |
| 1983 | 65.3 | 17.5 | 2.8 | 5.4 | 6.2 | 8.6 | 13.5 |

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1/ Includes Department of Defense - military, atomic energy defense activities, and other defense-related activities, such as emergency management and maintenance of strategic stockpiles and the Selective Service System.

## 3. Economic Effects of Defense Spending

During the past year, DoD has used commercially available models of the U.S. economy to study economic effects of changes in the level of defense spending. The comments made here reflect the results of that work and results obtained by leading private economists.

### a. The Federal Deficit and Defense Spending

Proposed defense budgets have been increasingly discussed in terms of the large federal deficits projected for the next several years. It has been argued that the size of the projected deficits, and the implications of these deficits for the economy, present a strong case for cutting defense spending. This argument does not consider the national security concerns that justify the levels of defense spending proposed by the Administration. Moreover, strictly on economic grounds, even drastic cuts in the proposed Five-Year Defense Program would not produce dramatic reductions in the deficit.

The total obligational authority (TOA) for acquisition of major weapon systems is paid out over a period of several years. Consequently, large cuts in TOA would produce only relatively small reductions in outlays in the current budget year.

Monies appropriated for pay, operations, and maintenance are paid out much more rapidly than are appropriations for procurement. But the costs of cuts in terms of readiness of our forces are also quickly felt and could be severe.

It is also important to recognize that cuts in defense spending would not reduce the deficit on a dollar-for-dollar basis. They do not for two reasons. First, and most important, cuts in defense spending tend to reduce revenues because:

-- A large part of DoD expenditures becomes income to firms and individuals, some of which comes back to the government in taxes; and

-- The ripple effects from defense spending tend to stimulate growth in GNP, which also increases total tax revenues.

Second, because defense spending stimulates the economy, cuts in defense spending tend to increase unemployment and therefore are offset partially by increased government unemployment compensation payments. This effect is quite small, but still large enough to show up on the economic model used in the DoD analysis.

Analysis done by DoD shows that each dollar cut from defense spending reduces the deficit by about 50 cents in the year in which the cut is made. If defense spending remains at a lower level, the effect on the deficit becomes even smaller over time.

The projected federal deficits cannot be attributed simply to the proposed increases in defense spending. The federal budget last ran a surplus in 1969. During each of the following seven years, real DoD outlays declined and by 1976 were lower than they had been in any other year since 1951. During the seven years 1970-76, the Consumer Price Index increased 47% (more than twice the increase of the preceding seven years) and the federal budget went from a surplus of $3.2 billion in 1969 to a $66.4 billion deficit in 1976. In real terms, DoD outlays will be less in FY 1983 than they were in FY 1969, the year of the last budget surplus.

### b. Employment Effects of Defense and Non-Defense Government Purchases

The budgets proposed by the Administration imply significant shifts in the composition of federal spending. In real terms, transfer payments remain constant over the FY 1981-85 period, while defense spending increases and "all other" spending decreases. Because of these compositional changes, there has been substantial attention paid to the question of whether DoD outlays create more -- or fewer -- civilian jobs than other forms of government spending.

Critics have argued that other government programs create more jobs per $1 billion of outlays than does defense spending. One study has even claimed that defense spending reduces employment.

In March 1982 DoD estimated that each $1 billion in DoD non-pay outlays creates 35,000 civilian jobs. This estimate is an average effect across different DoD budget accounts (excluding military and civilian pay and retired pay). The estimate includes:

-- Direct employment by DoD prime contractors;

-- Employment, below the prime contractor level, involved in production of goods and services used in production of defense goods;

-- Employment involved in production of added demands for consumer goods (and their inputs) that stem from wages and salaries of individuals directly and indirectly employed in defense production.

Some parts of DoD outlays have larger employment effects than do others. For example, each $1 billion in military pay goes to about 49,000 servicemen and women. The same is true of other major categories of government spending. Consequently, comparisons of employment multipliers for narrowly defined categories have little significance.

DoD has examined the employment effects of DoD purchases of goods and services and the employment effects of non-defense federal purchases of goods and services using the models of three leading economic forecasting firms. Each of these models projects that, in current economic circumstances, increases in defense purchases outlays increase civilian employment. Furthermore, there does not seem to be much difference in the employment effects of defense procurements and other federal government purchases. It is also worth noting that transfer payments tend to create fewer jobs than either defense or non-defense procurement since they are less stimulative to the economy than purchases of goods and services.

### c. Bottlenecks

Bottlenecks are not currently a serious problem for defense production and there is a consensus among those who have studied the matter that significant bottlenecks are unlikely to occur over the next two or three years. However, some commentators have suggested that there is a serious question as to whether substantial bottlenecks will occur in the second half of the decade.

These suggestions do not reflect detailed studies of projected defense and non-defense demands in comparison to capacity. Instead, they are grounded on a few broad considerations:

- -- Planned DoD procurement outlays increase more rapidly than the defense budget as a whole over the period FY 1982-87;
- -- there will be rapid growth in defense purchases from a relatively small number of industries in the durable goods sector; and
- -- by 1986, the economy will have rebounded from the current recession and will be growing.

Expressions of concern about bottlenecks that proceed from these points often imply interest in a detailed list of projected defense and non-defense demands and projected capacity to meet those demands. Assembling such a list would be a truly monumental task, but much of the information is available on a decentralized basis. In fact, it is used by decisionmakers to ensure that defense production plans are consistent with available capacity.

This is especially true of the prime and major subcontractor level of defense production. At this level, consideration of capacity is an explicit part of the acquisition and budget planning process. For example, the decision to proceed with the B-1B program involved both the establishment of a production schedule and provision (partly funded by DoD) for construction of a new plant and refurbishment of an older plant in which the B-1B will be assembled.

Those who move from the general points listed above to a concern about bottlenecks often tacitly assume that defense and non-defense demand compete for the same capacity. But this is generally not true at the prime contractor level. For example, almost all military aircraft are produced in facilities that are not used to produce civilian aircraft and that could not readily be converted to production of civilian passenger and transport aircraft. There are some examples (jet engines, for one) of final products produced for both military and civilian markets in the same plants. But these examples are distinctly exceptions, not the rule. For the more typical items of military hardware -- tanks, artillery, missiles -- the question of an overlap with civilian markets hardly arises.

Viewed against this background, it is clear that shortages of capacity at the prime contractor and major subcontractor level would be unusual.

The situation below the prime contractor level is more problematical. A detailed, exhaustive search for potential bottlenecks is not a practical possibility, as the lower tiers of the defense production process involve tens of thousands of firms and millions of products.

But we can approach the question indirectly, by recognizing the distinction between lower-tier firms that produce specialized defense goods, and industries that sell substantially the same products for defense and civilian applications. Examples of products in the first category are some very large castings, such as ships' propellers and specialized electrical connectors. The metals industries provide characteristic examples of the second category (e.g., the same grades of refined zinc are used in defense and non-defense production).

Most industries fall into this second "non-specialized" category. Furthermore, defense demands are a small part of total sales for most of these industries. Even for the metals industries, defense and defense-related demands are characteristically only 4 to 6% of total demand. In many of these industries, the level of defense demand is projected to increase substantially over the next few years, but in view of the small share of defense demands these industries are very unlikely to be bottlenecks.

The exceptions to this statement are lower-tier producers of specialized defense goods and producers of non-specialized goods of which defense production takes a substantial share. It is only in these cases that it would be sensible to look for bottlenecks. Therefore, it is evidence on a fairly small number of industries -- and not just overall rates of growth in defense demand -- that is relevant to an evaluation of whether the defense buildup is likely to produce bottlenecks. We will continue to examine capacity and demand in these industries. While it is obviously impossible to ensure that problems will not arise in some parts of the defense production process, the information currently available does not indicate that the defense buildup will encounter or create widespread bottlenecks.

### 4. Price-Level Assumptions

The level of funding required to accomplish programs in FY 1984 and later is dependent on the course of inflation in the intervening years. Estimates of the future impact of inflation are prepared on the basis of guidance furnished by the Office of Management and Budget (OMB). The OMB guidance establishes aggregate inflation rates for the purchase of goods and services and the Consumer Price Index (CPI). The CPI is used for the retired pay accounts; and planned comparability pay increases, unless capped, are used for the military and civilian pay accounts. The estimated rates of inflation are applied to the required TOA on the basis of expenditure profiles characteristic of each account (e.g., Aircraft Procurement, Navy). These expenditure profiles are used to estimate the years in which the incurred obligations will be paid.

Special weapon system commodity inflation estimates were introduced in the FY 1983 budget. Data collected and published by the Department of Commerce's Bureau of Economic Analysis (BEA), as part of the official GNP statistics, indicate that inflation in nine of the commodity accounts normally exceeds inflation in the general economy. As a result, the purchasing power of those accounts had been less than intended by the Executive Branch and the Congress, and program management had been extremely difficult. The use of more accurate inflation estimates should improve program management and the execution of defense policy by moderating the too-frequent necessity to adjust planned acquisition levels in response to unanticipated cost increases.

### 5. Outyear Projections

Two years ago, this Administration presented a multi-year defense program based on a thorough assessment of our national security requirements. That program represented a balanced approach for significant improvement in the readiness, sustainability, and modernization of our forces. The $1.5 trillion budgeted for the period FY 1982-86 represented a significant increase in the allocation of budgetary resources to the national defense. This program has been adjusted several times. These adjustments, however, have been made principally due to federal fiscal constraints rather than to changes in our future needs or the threat.

The FY 1984-88 defense program, shown in Table II.A.4, represents a continuing commitment to the strengthening of our defense capabilities. This program, which totals $1.8 trillion, is based on the inflation and pay raise assumptions discussed above.

TABLE II.A.4

DoD Military Functions
($ Billions)

| Fiscal Year | TOA | Outlays |
|---|---|---|
| 1984 | 274.1 | 238.6 |
| 1985 | 322.4 | 277.5 |
| 1986 | 357.2 | 314.9 |
| 1987 | 389.2 | 345.6 |
| 1988 | 425.2 | 377.0 |

This program is large, and we are well aware that it is being proposed during a period when economic conditions require constrained or reduced federal spending. However, we must not lose sight of the fact that the defense budget is most appropriately measured against the reality of the threat to our national security and our fundamental obligation to protect our basic values and institutions. That principle must govern the allocation of resources to this basic national requirement of providing for the common defense.

## B. MANAGEMENT

### 1. Introduction

Our continuing emphasis on major management improvements reflects our commitment to restoring our defense capabilities, for it is only through a strict adherence to sound principles of effective and efficient management that we can maximize those capabilities at an affordable cost -- one that will provide a dollar's worth of defense for each tax dollar so allocated.

The continuing foundation for attaining the goal of improved management comprises a series of programs and initiatives set in motion at the outset of this Administration, including:

-- Strengthening and emphasizing long-range planning and strategic thinking in order to relate military policy and strategy more closely to the long-term and changing threat while taking full advantage of our intellectual and scientific capabilities.

-- Reforming the defense planning, programming, and budgeting process to stress planning, reduce paperwork, clarify the role of central staffs and the Services, and enhance the role of the Defense Resources Board.

-- Streamlining the weapon systems acquisition process by reducing costs, shortening lead times, reducing paperwork and regulations, providing more stability in long-term procurement, and strengthening our defense industries.

-- Focusing high-level attention on a number of major program efforts throughout the Department to reduce costs; eliminate fraud, waste, and abuse; reduce duplication and overlap of functions; and develop better management practices.

Other actions include continuing organizational improvements, improving program efficiencies, and implementing Department-wide cost reduction actions.

### 2. Major Management Systems Improvements

#### a. Strategy and Policy Formulation

We have redesigned and greatly strengthened the strategic planning process to provide increased assurance that our major force structure and budget decisions are driven by a clear understanding of our interests and objectives, an accurate appreciation of the threat, an understanding of the world situation, and an accurate appraisal of our present capability. Expanding our perspective beyond the consideration of the funds available in any single budget year, we measure major program decisions against long-term threats and needs, long-term cost projections, and the acquisition principles adopted during the first year of this Administration.

To assist the strategic planning process, we have established a Strategic Concepts Development Center at the National Defense University. The Center performs conceptual work and provides advice on a wide range of strategic issues to the Secretary and Deputy Secretary of Defense, the Joint Chiefs of Staff (JCS), and other interested federal officials, thereby contributing to the intellectual foundation for defense policy and strategy. We plan to continue to draw upon this resource for independent reviews, long-range planning initiatives, and special projects dealing with military strategy.

b. The Planning, Programming, and Budgeting Process

We have made significant progress in improving the DoD planning, programming, and budgeting process (PPBS) -- the major decisionmaking system in the Department. The new approach to PPBS enhances the participation of top DoD officials and Service line managers, and ensures that the military advice of the Joint Chiefs of Staff and the Commanders of the Unified and Specified Commands is heard and fully considered. Throughout the process, we emphasize centralized control of policy development and decentralized policy execution. Under this arrangement, the Service Secretaries and senior staff can concentrate on major policy questions in offering their advice and recommendations to the Deputy Secretary and me. The Services have been given greater responsibility for the day-to-day management of the resources under their control. The OSD staff provides overall technical support and major mission-oriented analyses necessary to coordinate the capabilities of all the Services and to meet the objectives identified by the President and Congress.

A major change has been the strengthening of the Defense Resources Board (DRB), the principal advisory body for the Department's program review process. We are now using the full capability of the Department to formulate policy and design programs. The DRB now includes the Service Secretaries and the Chairman of the JCS as full-time members and has direct access to the views of the Unified and Specified Commanders, which was not the case in the past. Additional professional military advice is provided by the four Service Chiefs, who are invited to all meetings at which important policy issues are to be discussed.

In the last nine months of 1981, this reconstituted DRB met 31 times to review and decide on defense policy, strategy, planning, programs, and the budget. During 1982, the DRB met on 28 separate occasions to address critical national defense issues. We are convinced that the reinvigorated DRB provides a more effective and integrated capability for formulating policy and strengthening programs.

c. Weapons Acquisition Management

Soon after taking office, we conducted a comprehensive review of the Defense Acquisition Process, with a view toward the reform of its management. The review sought to identify specific ways to reduce costs, to make the acquisition process more efficient and time-sensitive, to increase the stability of our programs, and to revitalize our defense industrial base. In April 1981, we incorporated our findings and recommendations into the DoD Acquisition Improvement Program, which was described in my report last year. This year I would like to comment on the status of initiatives in several key areas.

## (1) Increasing Program Stability

### (a) Topline Stability

Program instability has undermined both our modernization efforts and the long-range planning conducted by industry. Our guidance to the Services now emphasizes the need to cancel lower-priority programs in order to provide funding stability for our highest-priority programs, particularly in the outyears. Accordingly, we have established a stable program list to provide certain major production programs an extra degree of protection against fluctuations in the budget.

In addition, we have developed mechanisms to ensure that stability and other management initiatives are prominently considered in the planning, programming, and budgeting process as well as in our major system milestone reviews. One of these initiatives is designed to screen major systems new start proposals from the Services. Only 10 new starts were accepted this year, down from the 15 accepted for FY 1983.

The Department has lived with topline instability for too long. Although we are now making an effort to achieve program stability within the existing budget, it will take some time for this new way of approaching the problem to be fully implemented in our planning process.

### (b) Multiyear Contracting

Multiyear contracting reduces the cost of low-risk programs already in production by providing funding for larger, more economical lot buys rather than smaller buys on an annual basis. As can be seen on Chart II.B.1, this type of contracting can produce significant dollar savings when compared to year-to-year contracting. It also can mean decreased financial borrowing costs, better use of industrial facilities, and a reduction in the effort required to place and administer contracts.

Progress has been made in implementing multiyear procurements for many of our major programs, and we may have opportunities to implement them more effectively in the future.

## (2) Cost Growth Control

Another major objective of the improvement program has been to control the substantial cost growth that has occurred in our major programs. Since this kind of growth emanates from a variety of sources, a comprehensive set of solutions was required. These include:

### (a) Realistic Budgeting

The most significant cost growth problem we have experienced in recent years has been related to unpredicted inflation. As part of the acquisition initiatives, agreement was reached with the Office of Management and Budget to improve inflation projections for DoD acquisition programs. This initiative is described in the Budget chapter of this report.

Another contributor to the cost growth problem has been the tendency for both industry and the buyer to submit

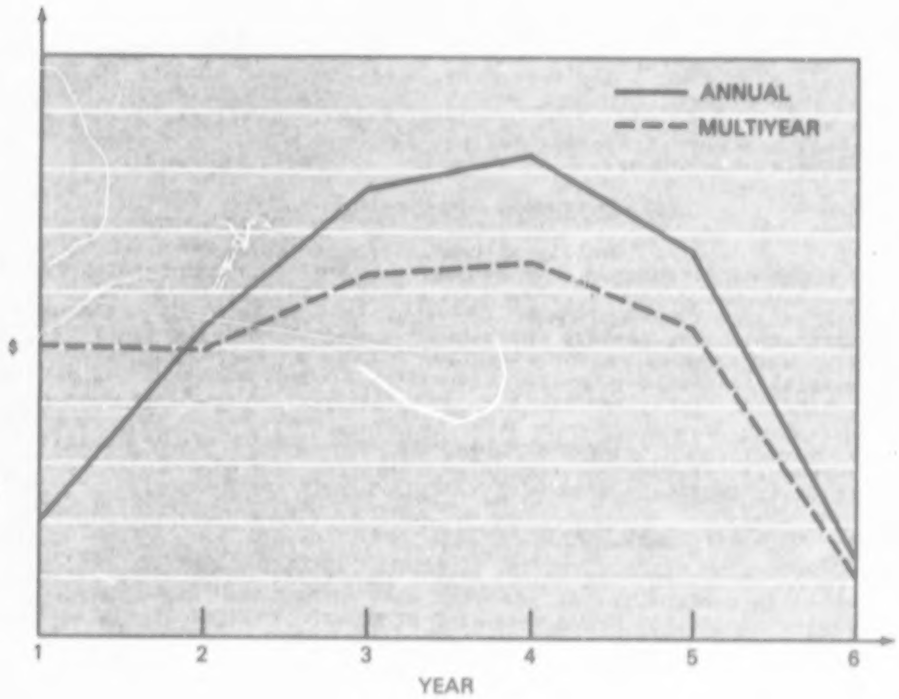
Chart II.B.1

COMPARISON OF TYPICAL MULTIYEAR
AND ANNUAL OUTLAYS FUNDING PROFILES

(Dollars in Millions)

Chart II.B.1

COMPARISON OF TYPICAL MULTIYEAR
AND ANNUAL OUTLAYS FUNDING PROFILES



optimistic cost estimates for their programs. Realistic cost estimates, which take into consideration technological risk, are required before the cost growth problem can be brought under control. A major step toward this goal was taken by the DRB when it decided that the Services should use independent cost estimates in developing their program budget projections and required them either to budget the higher of the independent cost estimate or the program manager's cost estimate, or to explain their rationale for not selecting the higher estimate. This new policy will be phased in this year by each of the Services. We also routinely require the Services to provide an independent cost estimate, which is reviewed by the OSD Cost Analysis Improvement Group at each DSARC milestone.

(b) Competition

One of the most effective means to control cost growth is through competition. Accordingly, greater attention is being paid to obtaining competition in our contracting. The benefits to be derived from this practice have been recognized by all. The advantages of competition, however, should not be viewed only in terms of statistics, which can be misleading. For instance, funds placed with a second contractor can encourage the original source to resolve program problems. This was the case with funds spent to develop a potential alternative to the existing power plant in the Air Force's first-line tactical aircraft. That action is credited with having accelerated corrections to problems with the existing engine.

(c) Preplanned Product Improvement ($P^3I$)

In making our acquisition decisions, we are often faced with a choice of deploying a system early with available technology or waiting until more advanced technology is at hand to achieve improved performance. In the former case, we court the danger of early obsolescence; in the latter, we delay the equipping of our forces in the field. Under the $P^3I$ initiative, we are striving to achieve early system deployment at an acceptable level of capability and technical risk, while retaining the growth potential to extend the system's life cycle through subsequent technological improvements.

(d) Funding Flexibility

I believe we could improve our control over cost growth if we had greater flexibility in reprogramming funds between procurement and research and development accounts. Last year, we asked Congress to grant us permission to transfer funds in a given fiscal year from the procurement to the research and development accounts, as long as the money remained within the same weapon system. Congress denied the request in our appropriations bill for FY 1983. We believe that with this authority, we could remove one of the more constraining elements in the acquisition process, and will again request that this flexibility be granted. On the other hand, we have had more success in allowing for the transfer of funds. As a result of our efforts to obtain an increase in this authority, Congress agreed to raise the general transfer ceiling from $750 million to $1.2 billion for FY 1983. In addition, Congress has already granted us authority to increase the reprogramming threshold in military personnel and procurement appropriations from $5 to $10 million and in the RDT&E account from $2 to $4 million, which allows for greatly increased flexibility for reprogramming within the Services. This last initiative will simplify the administrative aspect of changes to programs.

### (3) Improving Relations With Industry

Without the understanding and active participation of industry in the planning and implementation of the Acquisition Improvement Program, real progress will be limited. Consequently, consultation with representatives from industry has characterized the acquisition improvement process since its inception.

Many actions are currently under way or are planned to revitalize interest in doing business with DoD and to make doing business with us less burdensome and less complicated. Through a combination of positive incentives and simplified procedures, the Department can establish a more productive relationship with industry and revitalize interest in defense business.

Specific actions have also been taken to encourage capital investment by industry. For example:

(a) Increased progress payments to contractors have improved the cash flow situation for business and are an important prerequisite for increased investment. We are also supporting legislation to transfer to the Office of Management and Budget the authority to revise and modify cost accounting standards. Additionally, we are developing a plan to enable more rapid depreciation of certain contractor assets under our contracts.

(b) It is important that the Department encourage modernization of our industrial base through capital investment. This can best be achieved by providing the climate and motivation that encourage a personal and capital commitment by corporate management. To that end, we have established the Industrial Modernization Incentive Program to encourage and support industrial modernization and productivity-enhancing investments. The program will provide a focus for productivity improvement efforts by industry and government and will integrate DoD actions in areas affecting productivity.

### (4) Improving Support and Readiness

This part of the Acquisition Improvement Program is designed to address the low state of readiness and sustainability of our weapons. Barriers to improving readiness and support reflect the tendency to establish priorities solely on the basis of cost, schedule, and performance objectives.

Implementation of specific initiatives to improve support and readiness has already begun. The first step is to work toward the assignment of readiness goals as design objectives in all major acquisition programs, and all three Services have made solid progress in that direction. There is a remaining need to strengthen the organizations and procedures for test and evaluation of support and for providing independent readiness assessments as inputs to acquisition reviews. These goals are being incorporated in revisions to our directives and instructions. In addition, to ensure equal emphasis with other program objectives, contract awards will also consider prior contractor performance in these areas.

### (5) Implementation

During the first year of our Acquisition Improvement Program, the focus was on policy development and implementation of that policy through such means as directives and instructions.

Now, it is time to move these policies down to the appropriate decision-making level for each initiative. In so doing, we will rely heavily on the Service acquisition commanders who, serving as focal points for the Acquisition Improvement Program, will oversee acquisition improvement initiatives within the Services and will assist in pushing policy decisions down to the working level.

While a great deal has been accomplished during the past year and a half in improving the acquisition process, complete success in this endeavor will take time and require the continued support of industry, the Services, and Congress.

### d. Secretary of Defense Performance Reviews

In June 1981, we instituted weekly performance review sessions to focus senior-level management attention on key programs and related management issues. These reviews, conducted in an informal setting, serve to apprise the Deputy Secretary and me of problems in sufficient time to let us act on them and provide timely feedback to the responsible Defense officials.

During 1982, performance reviews focused on selected major weapon systems as well as ongoing programs. Representative of the programs covered during these reviews were shipbuilding, security assistance, the cruise missile program, host nation support, and manpower planning for improved readiness.

In order to monitor the progress of two exceptionally critical programs, the Deputy Secretary and I receive biweekly reports on the B-1 bomber and the Peacekeeper missile.

### e. DoD Efforts to Eliminate Waste and to Prevent and Detect Fraud and Abuse

During the past year, we have continued to strengthen the Department's audit, inspection, and investigative capabilities to eliminate waste and to prevent and detect fraud and abuse.

The position of Assistant to the Secretary of Defense (Review and Oversight) (ATSD(R&O)) was created in April 1981 to coordinate the efforts of the Department's auditors, inspectors, and investigators. Since its establishment, the ATSD(R&O) has been instrumental in the following:

(1) Establishment of the Defense Criminal Investigative Service, an agency that will concentrate on the detection and prevention of fraud and other crimes within the Office of the Secretary of Defense, the Joint Chiefs of Staff, the Unified and Specified Commands, and the Defense Agencies, and those crimes that involve more than one Military Service.

(2) Development and initial testing of the Defense Investigative Management Information System for tracking significant criminal investigations by DoD as well as those referred to the Justice Department.

(3) Initiation of an oversight and review function relating to all criminal investigation matters within DoD.

(4) Revitalization of the Defense Hotline through consistent publicity and strong management support.

(5) Establishment of a unit to investigate and prosecute major fraud and corruption cases affecting procurement in the Department. The unit will initially be staffed by attorneys from the Department of Justice who will work with their counterparts from the Department of Defense.

(6) Direction of Defense Audit Service (DAS) activities. The 143 reports issued during FY 1982 contained recommendations with a potential monetary benefit of over $760.6 million, or about $43 for every dollar spent on audit resources. Audits of areas susceptible to fraud, waste, and mismanagement were given high priority in the planning of FY 1983 audits.

(7) Initiation of the concept of DoD-wide audits to complement existing interservice audits. These audits are performed jointly by the Defense Audit Service and the Military Service audit organizations. The DoD-wide survey of excess Defense Department real property is an example of such a joint audit effort accomplished during 1982.

(8) Direction of government-wide audits of payroll operations and government equipment in the possession of contractors under the auspices of the President's Council on Integrity and Efficiency.

(9) Establishment of new audit resolution and follow-up procedures. During the six-month period ending 30 September 1982, 211 disputed internal audit recommendations were resolved under the system and corrective actions were completed on almost 31,000 agreed-upon audit and internal review recommendations, with savings of $338 million.

(10) Establishment by each of the Military Services, as well as relevant Defense Agencies, of a contract audit follow-up system.

(11) Development of new procedures to emphasize the audit findings, conclusions, and recommendations in General Accounting Office reports and thereby ensure that the Department obtains maximum possible monetary and management benefits from these reports.

The role performed by the ATSD(R&O) will be assumed by the Defense Inspector General, a position created in September 1982 by Public Law 97-252.

### f. Defense Council on Integrity and Management Improvement

In September 1981, we established the Defense Council on Integrity and Management Improvement. The high priority we place on the Council's work is reflected in its membership, which includes the Under Secretaries of the Army, Navy, and Air Force; the Under Secretary of Defense for Policy; the Under Secretary of Defense for Research and Engineering; the Assistant Secretary of Defense for Manpower, Reserve Affairs, and Logistics; the Assistant to the Secretary of Defense for Review and Oversight; and the Executive Secretary. The Department's General Counsel and the Assistant Secretaries of Defense (Comptroller, Legislative Affairs, and Public Affairs) serve as advisors to the Council.

The Council has three primary missions:

- -- To identify and pursue management improvements in DoD;
- -- To stimulate and act as a forum for innovative ideas; and
- -- To ensure follow-up of the results of audit, inspection, and investigative activities.

We consider the Council to be one of our most effective vehicles for generating and sharing new ideas to improve Departmental management and for ensuring that decisions made by top management are implemented throughout the Department. In effect, the Council serves as the conduit through which we can disseminate cost-cutting recommendations to every echelon within the Department.

The Council has initiated a DoD-wide Management Improvement Program. The program is designed to:

- -- Encourage managers at all levels to develop, suggest, and implement innovative ideas;
- -- Capture the benefits of innovative ideas in existing programs; and
- -- Emphasize the positive steps DoD managers are taking to improve management.

During the first phase of its existence, the Council addressed topics such as the economy and efficiency programs initiated by each Military Department, the status of the Acquisition Improvement Program, management initiatives undertaken by the Defense Agencies, and improvement of our automated information systems.

During 1982, the Council entered a second and more aggressive phase when it initiated major reviews of several key management areas including:

- -- Material inventory accuracy;
- -- Disposal of surplus Defense Department property;
- -- Consolidation of base support activities at neighboring installations;
- -- Government-owned equipment and material currently in the possession of private contractors; and
- -- DoD health care delivery systems.

The Council's emphasis on management improvements has already led to renewed efforts in existing programs and to more rapid development of innovations in the Services and the Defense Agencies. We are confident that the climate of support for innovative management fostered by the DoD-wide management improvement effort will increasingly produce results that will benefit the entire Defense Department.

### g. Organization of the Office of the Secretary of Defense

#### (1) Additional Assistant Secretary Positions

In 1981, we requested legislation to restore the five Assistant Secretary positions eliminated by the previous Administration in 1977. Experience has demonstrated that the elimination of those positions substantially reduced the flexibility of the Department in adapting the Office of the Secretary of Defense to this Administration's defense priorities, policies, and program emphasis. If the proposed legislation is enacted by Congress, three of the new Assistant Secretary positions will be used to strengthen the Office of the Under Secretary of Defense for Research and Engineering.

-- An Assistant Secretary of Defense (Development and Support) will be established to provide increased management attention to the development of those military capabilities represented by deployed systems and equipment, and to provide provide an improved focus on acquisition objectives.

-- An Assistant Secretary of Defense (Research and Technology) will be established to improve our approach in selecting the best technology programs to achieve and maintain a qualitative lead in deployed systems.

-- The position of Deputy Under Secretary of Defense (Communications, Command, Control, and Intelligence) will be upgraded to Assistant Secretary status in response to Congress' concern that the position be afforded increased visibility and status.

The remaining two positions will be used to strengthen the Army and Navy Secretariats.

#### (2) Office of Management Policy

In February 1982, we established an Office of Management Policy whose Director reports directly to the Deputy Secretary and me. The office concentrates on maintaining the momentum of the management actions that we have already undertaken in the Department, working with the Services and the central staffs. By focusing on the critical problems in implementing the principles and policies of our management initiatives, the Office of Management Policy will enhance the development of new efforts and reinvigorate existing actions.

## 3. Other Management and Program Improvements

### a. Command, Control, Communications, and Intelligence ($C^3I$)

During the past year, we have continued a number of management initiatives to focus attention on the careful integration of weapon systems and $C^3I$ systems within a cohesive framework.

(1) In an effort to provide a comprehensive review of Service programs, OSD undertook a series of mission area assessments to identify mid-term and long-term resources required for correcting existing deficiencies and responding to the evolving threat. As a

result, program deliberations were supported by a balanced perspective of the various weapon systems and $C^3I$ systems which contribute to specific mission capabilities.

(2) To provide a long-range perspective on total system architecture, DoD has developed a number of specific master plans for system acquisition. These plans include the North American Air Defense Master Plan, the DoD Plan for Intelligence Support to Operational Commanders, and various plans for electronic warfare and other capabilities applicable to $C^3$ countermeasures and non-strategic nuclear forces $C^3$.

(3) These efforts were complemented by several OSD-sponsored studies (involving both industry and government participants) that addressed a wide range of issues, including NATO air defense operations, cruise missile survivability, and battlefield surveillance/ target acquisition. These studies have proved useful for establishing research and development objectives, as well as for consolidating certain acquisition programs.

(4) DoD has revised its directives regarding the development of electronic warfare systems. Specifically, we have improved our approach to considering projected threats in the development cycle -- a step that will streamline our acquisition process and result in the fielding of more responsive electronic warfare systems.

(5) We have established an Executive Committee for the oversight of high-priority $C^3$ programs. This committee consists of the Deputy Secretary of Defense and the Chairman of the Joint Chiefs of Staff, with the Under Secretary of Defense for Research and Engineering serving as secretary.

(6) We are strengthening the capability of the Organization of the Joint Chiefs of Staff (OJCS) to manage strategic and joint tactical $C^3$ systems by improving long-range planning documents, by including comprehensive $C^3$ guidance in the Defense Guidance, by issuing specific guidance for high-priority joint and cross-service programs, and by having the OJCS monitor Service compliance with the guidance.

(7) $C^3$ systems management organizations are being reviewed and actions have been taken to consolidate guidance, planning, and user requirements at top management levels and to decentralize detailed program management. For example, an office has been established in the $C^3$ Systems Directorate of the OJCS to coordinate requirements for data processing support for functions such as resources and unit monitoring and conventional planning and execution. Meanwhile, the Air Force has been designated as Executive Agent for the development of the WWMCCS Information System (WIS). The OJCS will coordinate and validate the information processing requirements of the Unified and Specified Commands. The Services and the WIS Joint Program Manager, under the Air Force, will be responsible for system development.

Other organizational realignments are under review to improve management effectiveness and efficiency and to make the organization responsible for $C^3$ systems management more responsive to the users.

(8) In an effort to increase the influence of the operator during the early phases of our acquisition programs, we have asked the Joint Chiefs of Staff to task unified and specified commands to

work with our joint development and acquisition offices to begin early development of joint doctrine. This will ensure that, through operational evaluation, full definition of joint tactics, techniques, and procedures will be available for effective training when systems are fielded for operational use.

### b. Health and Medical Activities

To make the military health care system as responsive and cost effective as possible, we have recently implemented a long-range plan to address mobilization, individual physical and mental well-being, resources management, quality assurance, and information systems. We have designed the following management systems to contain costs and to improve our capabilities to evaluate and plan for the delivery of care.

(1) The Defense Enrollment Eligibility Reporting Systems (DEERS) Program Office has completed enrollment of over nine million people in the continental United States. The data that it provides on beneficiaries will significantly improve planning for the use of resources. The program will be integrated with other key defense programs, including the new personnel identification card and the Tri-Service Medical Information System (TRIMIS).

(2) The Uniform Chart of Accounts (UCA) system collects data on workload and costs of the direct care system worldwide. This information is available for analysis and the development of a new measure of health care resource management called the "Health Care Unit (HCU)."

(3) Implementation of Uniform Staffing Methodologies (USM) began in FY 1982 and will be completed in FY 1983. The USM will provide for uniform manpower requirements determination and allocation procedures.

(4) The Data Management Information System (DMIS) integrates data from the Military Departments and defense agencies and provides a single source for the development of analyses to support health care management. The current stage of DMIS development will be completed in FY 1983, including selection and use of state-of-the-art data base management techniques.

### c. Chemical Matters

The Office of the Assistant to the Secretary of Defense (Atomic Energy) has been designated the focal point for chemical matters. A deputy for chemical matters has been designated to provide overall guidance and direction for the DoD chemical warfare program. The new arrangement will ensure an integrated DoD-wide program to counter the substantial Soviet chemical warfare threat.

### d. Materiel Disposal Practices

We have revised our directives and procedures to limit the premature disposal of surplus materiel. Actions have been taken to improve surplus sales and scrap operations, shipment controls, precious metals recovery and reuse, automated disposal systems, pricing of excess items for foreign military sales, and the disposal of unneeded government-owned materiel used by contractors. We have met with prospective bidders interested in buying and demilitarizing obsolete conventional ammunition and selling the residue for scrap.

This would reduce required covered storage space, and government resources would not have to be expended to demilitarize this ammunition. Cost avoidances in this area would range from $10-$100 million.

### e. Sale of Unneeded Defense Real Estate

The Department of Defense contributes about half the excess real estate properties that the government disposes of each year. This year, we submitted lists to the Federal Property Review Board and the General Services Administration that identified 93,000 acres with an estimated value of $740 million. Subsequently, the Board released a list of defense properties amounting to 44,500 acres that were potentially available for quick sale.

### f. Management of Conventional Ammunition

We have recently strengthened the role and functions of the Single Manager for Conventional Ammunition to maximize the timely availability and ready state of conventional ammunition assets. While this change was made to enhance readiness, over $600 million in cost avoidances have been reported through single manager initiatives during 1978-82. We are reviewing these functions further to determine if additional dollars could be saved and readiness improved by further strengthening the roles of the Single Manager for Conventional Ammunition in the acquisition, production, distribution, maintenance, and disposal of ammunition items.

### g. Energy Conservation

Since the 1973 oil embargo, we have developed and funded programs to reduce the rate of growth of our energy consumption and costs. To date, over $1 billion have been invested in facility energy conservation projects alone, resulting in almost $400 million annual savings in energy and maintenance costs. We are reviewing projects and creating incentives which, if implemented, could save us an additional $500 million per year.

### h. Personal Property Shipping Office Consolidations

During the past year, we completed the consolidation of Personal Property Shipping Offices in the continental United States, thereby enhancing opportunities for savings and improved service in shipping the personal property of military members. Next year, we will complete plans for overseas shipping office consolidations.

### i. Travel Management

We have taken several actions to reduce travel and its costs. Approximately 70% of DoD travelers are currently using discount air fares as a result of the improved visibility given these costs through the use of management reports. We have projected economies of approximately $27.7 million through the use of the GSA/ DoD Contract Air Service Program, which provides reduced air fares to government travelers on official business. In FY 1982, 18 air carriers participated in this program over 153 routes. We anticipate that the program will be expanded to cover over 400 routes in FY 1983. Also, during this next year, we plan to conduct a test of the use of travel agents at three military installations to determine if additional economies can be realized through application of their expertise in making rental car and hotel reservations and other travel arrangements.

### j. Information Resources Management

We have undertaken several management initiatives intended to improve the integration of previously fragmented information resource management activities. The functions of information resources technology management, data element standardization, forms management, information analysis reports management, paperwork management, and statistical analysis have been combined into a single organization under the Assistant Secretary of Defense (Comptroller).

This organizational structure supports evolutionary transition from traditional and often disparate information resource management functions to a more integrated approach. Better coordination and integration of these functions will result in more consistent DoD information plans, policies, and procedures; improved effectiveness of information; increased information sharing, and, therefore, decreased cost of collecting and maintaining information.

### 4. Economies and Efficiencies

In previous announcements and in testimony before the Congress, we have indicated the increases requested for essential improvements in our Defense capabilities would be offset in part by savings resulting from our acquisition initiatives and improvements in our operations. Last March we projected savings in FY 1981-87 totaling $52 billion. Current estimates of savings through FY 1988 exceed $70 billion. Over $17 billion of these eight-year savings are attributed to acquisition initiatives, and $12 billion are in operations. Pay adjustments account for the remaining savings.

The largest economies are in the area of acquisition efficiencies. The largest potential for even greater economies appears to be in this area, where savings are dependent upon spending more up front in order to save more through economies of scale. These savings are only possible with the cooperation of the Congress, since Congress must authorize and appropriate the up-front funds required to achieve these projected savings. Through economic production rates and multiyear contracting, we estimate that $3.6 billion can be saved over the eight-year period.

In the area of operating economies, we estimate our greatest contribution to Defense economies and efficiencies to be in the category of administrative overhead. The $2.8 billion in estimated savings include curtailment of administrative travel, audiovisual activities, and consulting and management support contracts. Additional operations savings and cost avoidances are projected through improvements in logistical support, productivity enhancements, and the consolidation of base support functions on a geographical basis.

### 5. Conclusion

We will continue to take those actions necessary to enhance the management of the Department of Defense because we are convinced that this is required if we are to earn the trust and confidence of the American taxpayer. The taxpayers will bear the cost of a sound defense establishment because they realize, as well as we, the inherent need for it. But those taxpayers rightly insist that their money be wisely and well spent, and that increases in defense funds be translated into more and better equipment, at lower unit cost.

The Services and other organizational activities in DoD have fully supported these initiatives and are moving ahead with us. I ask Congress for its full support of our efforts to improve the management of our defense establishment. The improvements we make in managing defense resources contribute directly to enhancing our national security.

## C. MANPOWER

### 1. Introduction

This Administration remains committed to the All-Volunteer Force (AVF) as a means of meeting our peacetime military manpower requirements. Our recent success in recruiting and retaining men and women of the necessary quality and quantity in our armed services has demonstrated the viability of the AVF. Through both FY 1981 and FY 1982 our armed forces have been very successful in attracting and retaining sufficient numbers of personnel; but more important than their numbers is the fact that they have been among the most competent and well-qualified servicemembers to have worn the uniform during the AVF era. Increased Congressional support and the improved public attitude toward military service have made these gains possible. Although the current economic environment has also contributed to that success, we believe that the AVF will continue to work. For this to occur, however, it is essential that we maintain a proper level of pay; incentives, including bonuses and special pays; attention to quality of life issues; and sufficient recruiting resources.

The success our AVF has enjoyed in the past two years enabled us to look to military compensation as one way to help reduce the large federal deficit and at the same time continue our program of improved military capability. Accordingly, we have asked our military people to join with all other federal employees to shoulder a share of this burden by forgoing a pay raise this year. We realize that we are asking for a substantial sacrifice from our military people and that we accept some risk that recruiting and retention may suffer. But the need to reduce federal spending is clear. We will monitor the progress of recruiting and retention. If the readiness of our forces or the viability of the AVF becomes seriously threatened, we will seek a military pay raise in an amount sufficient to reverse those trends, if and when they appear. In any event, we will seek to redress this situation in FY 1985.

A major objective of this Administration related to the AVF is to improve further our military readiness through such means as a continued emphasis on military training, renewed efforts to improve the skill balance of the force, and a strengthened commitment to make more efficient use of our entire workforce, military and civilian. We are committed to protecting and enhancing our investment in people.

The remainder of this chapter discusses the Department's manpower program. Detailed discussions of the program are in the Defense Manpower Requirements Report, as well as in the Military Manpower Training Report and the Force Readiness Report, which will be submitted in support of the FY 1984 President's Budget.

### TABLE II.C.1

### Defense Manpower Strengths
(End Strengths in Thousands)

| | FY 1982 Actual | FY 1983 | FY 1984 |
|---|---|---|---|
| Active Military | 2,108.6 | 2,127.4 | 2,164.7 |
| Selected Reserve | 963.7 | 1,002.3 | 1,030.4 |
| Individual Ready Reserve/ Inactive National Guard | 395.7 | 429.8 | 460.8 |
| Standby Reserve | 52.0 | 52.4 | 51.6 |
| Military Retirees [1] | 268.0 | 287.0 | 305.0 |
| Civilian [2] | 1,029.9 | 1,056.2 | 1,072.2 |

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[1] Only those retirees who would be mobilized
[2] Excludes civil functions

## 2. The Manpower Program

### a. Active Force

### (1) Current End Strengths

The following table presents current and projected active duty manpower end strengths. We plan to increase the number of active military personnel at the end of FY 1984 by 56,100 over end-FY 1982 levels.

### TABLE II.C.2

### Active Military Manpower
(End Strengths in Thousands)

| | FY 1982 | FY 1983 | FY 1984 |
|---|---|---|---|
| Army | 780.4 | 780.0 | 782.6 |
| Navy [1] | 553.0 | 560.3 | 572.2 |
| Marine Corps | 192.4 | 194.6 | 197.3 |
| Air Force | 582.8 | 592.5 | 612.6 |
| DoD Total | 2,108.6 | 2,127.4 | 2,164.7 |

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[1] In FY 1983 and beyond, reserve personnel on active duty for Training and Administration of Reserves (TARs) are categorized as Selected Reservists (SELRES); prior to FY 1983, TARs were included in Active Military strengths. FY 1982 TAR strength was 11,000.

### (2) Recruiting

FY 1982 was an excellent recruiting year in terms of both quality and quantity. As in FY 1981, all four Services met or exceeded their recruiting goals. Table II.C.3 shows the actual Service enlisted accessions for FY 1982 and planned recruiting levels through FY 1984.

TABLE II.C.3.

Actual and Planned Enlisted Active Duty Accessions
(Numbers in Thousands)

| | Actual FY 1982 | | Planned | |
|---|---|---|---|---|
| | Number | Per cent of Objective | FY 1983 Number | FY 1984 Number |
| Army | 130.2 | 104 | 142.5 | 134.6 |
| Navy 1/ | 92.8 | 100 | 95.3 | 94.1 |
| Marine Corps | 41.6 | 103 | 43.7 | 44.8 |
| Air Force | 73.6 | 100 | 65.0 | 76.1 |
| DoD Total | 338.2 | 102 | 346.5 | 349.6 |

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1/ In FY 1983 and beyond, TARs are categorized as SELRES; prior to FY 1983, TARs were included in Active Military strengths. FY 1982 TAR active duty accessions were 6,000.

Table II.C.4 depicts high school graduate recruiting achieved by the Services for FY 1982 and the levels planned for FY 1983 and FY 1984.

TABLE II.C.4

Non-Prior Service (NPS) Active Duty Accessions
High School Diploma Graduates
Male and Female*

| | Actual FY 1982 | | Planned FY 1983 | | Planned FY 1984 | |
|---|---|---|---|---|---|---|
| | Number | Per cent | Number | Per cent | Number | Per cent |
| Army | 103.6 | 86 | 111.0 | 84 | 114.0 | 92 |
| Navy | 62.8 | 79 | 66.4 | 80 | 66.5 | 81 |
| Marine Corps | 32.4 | 85 | 30.9 | 76 | 31.7 | 76 |
| Air Force | 63.3 | 94 | 56.0 | 92 | 61.7 | 88 |
| DoD Total | 262.0 | 86 | 264.3 | 83 | 273.9 | 86 |

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* Numbers may not add to totals due to rounding.

Congressional restrictions enacted in FY 1980 as part of the FY 1981 DoD Authorization Act limit the proportion of recruits from the lowest scoring pool of eligibles (Category IV) that can be accepted and establish a floor on the high school graduate content of male accessions entering the Army. These restrictions were continued in the FY 1982 and FY 1983 DoD Authorization Acts. Table II.C.5 summarizes these restrictions.

TABLE II.C.5

Congressional Controls on Recruiting [1]

| Fiscal Year | Maximum Category IVs | Minimum High School Graduates |
|---|---|---|
| 1981 | 25% DoD Average | Army Males - 65% |
| 1982 | 25% Each Service | Army Males - 65% |
| 1983 | 20% Each Service | Army Males - 65% |
| 1984+ | 20% Each Service | No Restrictions |

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[1] Congress has added the provision that, beginning in FY 1982, the Services not enlist non-high school graduate Category IV Recruits.

Table II.C.6 shows that in FY 1982 the Services achieved quality levels mandated by the Congress. The more stringent limitations on Category IV accessions that are in effect for FY 1983 may present a challenge for the Army.

TABLE II.C.6

FY 1982 Non-Prior Service (NPS) Active Duty Accessions

| Service | Category IV as Percentage of NPS [1] | High School Diploma Graduates as Percentage of Male NPS |
|---|---|---|
| Army | 19 | 84 |
| Navy | 11 | 77 |
| Marine Corps | 9 | 84 |
| Air Force | 6 | 93 |
| DoD Total | 13 | 84 |

---

[1] Males and females

The Congressional recruiting constraints, expected improvements in the economy, and a continuing decline in the youth market size will make recruiting in FY 1984 and beyond an extremely challenging task. We believe the Services must have the recruiting resources and incentives to attract quality young men and women if they are to meet this challenge successfully. We will continue to make every effort to enhance both the attractiveness of military service and its competitiveness in the youth labor market. We will continue to monitor the effects of all of our recruiting incentives.

### (3) Retention and Career Manning

#### (a) Enlisted

Career force objectives for each of the Services have either been recently revised or are presently undergoing review. As a result of changing mission requirements, recommendations of external studies, the projected decline in the eligible youth population, and, especially, increased retention, the Services are moving toward a force that will be richer in career content, even as end strengths increase. Driven largely by recent gains in first term reenlistments, the growth in career force size is likely to continue into FY 1983 and FY 1984. These favorable trends may not hold up in view of the decision to forego the annual pay raise in FY 1984.

Enlisted retention remains at a high level in all segments of the force. Although we are pleased with the overall success, we are aware that the enlisted force still suffers from chronic shortages in some skills -- particularly in those career fields that are highly marketable in the civilian sector of the economy and those that involve arduous duties. A large portion of the shortages are in the mid-career levels. These shortages can be expected to persist as military strength increases to meet mission requirements. In last year's report we indicated that it would take approximately five to six years of consistent reenlistment success to solve the shortfall of experienced personnel in our chronically short skills, and we still adhere to that projection.

It should be emphasized that we are not counting on monetary incentives alone to meet our needs in shortfall skills. Without a doubt, the Enlistment and Selective Reenlistment Bonuses remain the primary incentives and have been most effective in attracting and retaining members in shortage skills. However, we also make maximum use of non-monetary management initiatives to improve retention. These initiatives cover the full range of the personnel life cycle involving policies in such areas as reclassification and retraining, promotion, reenlistment, and separation. Quality of life programs and job enrichment efforts under way are aimed at making military jobs more challenging and rewarding. In general, we will be making full use of all tools at our disposal to meet our retention goals.

#### (b) Officers

Our retention of officers has improved overall and can be described as exceptionally good. Some reasons for this are the comparability pay raise in FY 1982, the general state of the economy, and the improvement in public attitudes toward a military career.

We are particularly gratified by improved retention in several problem areas. More aviation people are being retained, although we have not yet made up the experience and numerical shortages caused by low retention in previous years. The improvement in retention has been strongly influenced by the slowdown of airline hiring, two significant increases in Aviation Career Incentive Pay (ACIP), and the continuation bonus in the Navy, as well as increases in bonuses and special pays targeted to specific officer shortages.

Retention of nuclear submariners has also improved because of increased financial incentives, but experience gaps will remain because of poor retention in earlier years. We are optimistic that the Air Force will be able to improve retention of engineers with the recent institution of a continuation bonus.

(4) Compensation

During FY 1981 and FY 1982, there were significant increases in military compensation. In addition to an 11.7% pay increase in October 1980 and an average increase of 14.3% in October 1981, substantial improvements were made in special and incentive pays, enlistment and reenlistment bonuses, and reimbursement for moving expenses. These actions restored military compensation to levels comparable with the private sector and were in large measure responsible for the dramatic turnaround in the accession and retention of military personnel over the past two years. We remain committed to providing our men and women in uniform a level of pay that is equitable and recognizes the rigors and sacrifices inherent in military service and allows us to meet our force objectives.

As part of a joint effort by the Administration and the Congress to reduce the federal budget deficit and restore long-term economic growth, the FY 1983 military pay raise was limited to 4%. In addition, because of the unacceptably large budget deficit projected for FY 1984, it has become necessary to remove from the President's budget the military pay raise previously planned for October 1983. Despite these pay caps, we believe we can continue to meet our manpower needs on an all-volunteer basis through FY 1984. However, we will closely monitor the effect of the deletion of the FY 1984 pay raise and, if it appears that it is or will become a serious detriment to force readiness, or endanger the viability of the AVF, we will recommend a military pay raise. Additionally, in our current planning for the FY 1985 budget, we are including provisions for repaying our military people for their sacrifice in FY 1984.

The Fifth Quadrennial Review of Military Compensation was begun in October 1982. The objective of the review is to assess the system of military retirement and special pays. The review has been further directed by the President's Task Force on Military Manpower to evaluate the capability of the military compensation systo attract and retain technical specialists. A report is scheduled for release in late 1983.

(5) Education Incentive Program

Education incentives have proven to be effective means of attracting high quality personnel to military service. The Veteran's Educational Assistance Program is designed to satisfy the needs of the different Services. It allows a basic benefit which can be supplemented by DoD for particular skills, as required. While supporting continuation of the existing program, DoD may need to request more comprehensive programs in the future.

At the same time, we are concerned about the effects of the delimiting date of the Vietnam-era GI Bill. As the 1989 expiration date of the program draws near, a sizable number of members eligible for benefits may decide to leave the Service in order to use them. Replacing these trained and experienced personnel would be expensive and time consuming. DoD supports extension of the delimiting date.

### (6) Quality of Life

Quality of life is a synthesis of many individual DoD programs that recognizes the importance of the people who make up the Armed Forces and acknowledges their contributions to the Defense effort. We have built on efforts begun early in this Administration to improve existing programs and have also generated new programs to help compensate for the demanding aspects of military life. Medical care, family and unaccompanied personnel housing, child care programs, exchanges, commissaries, recreation and community activities, institutional benefits, education, postal services, banking services, credit unions, and religious programs all fall under the broad umbrella of "quality of life." Quality of life also addresses issues such as tour lengths, assignments, housing allocations, and other non-pay compensation. It includes activities such as family support centers, financial counseling, lending closets, family services programs, and off-post housing referrals.

We have given priority to improving the quality of life in overseas and remote areas, both for single service personnel and, where accompanied tours are authorized, for families. Sixteen schools for dependent children in overseas areas will be built or remodeled during FY 1983. Fourteen new child care facilities will be constructed, as will eight physical fitness centers, ten family service centers, and three multipurpose recreational facilities. We plan to increase the number of family service centers on Defense installations from 214 to 266 over the next two years. To meet the growing demand for child care, the Department operates over 500 child care facilities on some 400 military installations worldwide. Family day care programs are also being expanded to provide more capacity.

Significant progress has also been made in the family advocacy area, where new initiatives have resulted in increased awareness, enhanced delivery of assistance to families in need, and improved measures aimed at the prevention of child abuse and neglect and spouse abuse.

We recognize that service people are making career decisions based on family issues and their quality of life. A significant correlation exists between quality of life programs, spouse satisfaction, and recruitment and retention of qualified people on the one hand, and the discipline, morale, and readiness of our forces on the other. DoD's efforts in the last two years, in concert with those of the Congress, clearly demonstrate our commitment to improving the quality of service life. Our ultimate goal must be to treat each member of the Armed Forces and his or her dependents with compassion, concern, and consideration.

### (7) Training

One of our foremost objectives is to continue the progress the military services have made toward making training more effective for individual service members and military units. Sound training is essential to the improvements we seek in combat readiness.

### (a) Individual Training

The improvements previously noted in accession quality and retention of experienced service members have important side benefits for training operations. Higher-scoring enlistees are more likely to complete their courses successfully. In addition, better retention holds down the number of new entrants that must be trained.

The main emphasis proposed for individual training in FY 1984 is on continuation of improvements previously begun. For example, the Air Force is continuing to implement incremental increases in the length of selected skill training courses, with emphasis on maintenance skills. The increases are applied where analysis has shown the need for more thorough training to improve job performance and raise the quality of maintenance.

### (b) Unit Training

We continue to place a high priority on obtaining the funding and facilities needed to give operational units adequate training. A number of these efforts are now bearing fruit by producing a degree of realism in training much higher than has previously been available. A prime example is the progress the Army has made with its National Training Center (NTC) at Fort Irwin, California.

The NTC concept grew out of the realization that maneuver and live-fire areas at the home bases of combat battalions are not large enough to accommodate realistic live-fire exercises for battalion-sized units. Beyond this, realism in terms of knowing what the real outcome would be in an opposing forces maneuver has never been attainable except through subjective judgments. The NTC, through the use of laser emitters and receivers that simulate live fire, computer tracking of player units, and other uses of advanced technology, provides this sorely needed element of realism. Units that rotate to the NTC for training typically demonstrate significant improvement in tactical proficiency as the lessons of realistic training are absorbed. Much can and is being done in each of the Military Services through ingenuity and the application of advanced technology to get the greatest possible benefit from investments in training.

## b. Active Force Personnel Readiness

This section addresses recent improvements in the personnel readiness of our active duty forces. It is retrospective and does not address nor attempt to justify the FY 1984 budget for the Department of Defense, but rather reviews our personnel readiness performance over the period FY 1980-82. Additional material is presented in the Defense Management Requirements Report and the Force Readiness Report.

Personnel readiness measures the current capability of our service members to perform the missions that they are assigned. While the readiness of an individual unit is based on the status of its equipment and supplies as well as its personnel, in this section we examine four aggregate indicators of our personnel readiness levels:

-- Strength -- the size of our personnel inventory,

- -- Experience -- the grade and experience mix of our personnel,
- -- Skills -- occupational qualifications that match the requirements of the job to be done, and
- -- Turnover -- the rate at which the population flows through the system. Turnover captures the net effect of gains and losses of all types, as well as retention.

These will be discussed in turn in the remainder of this section.

### (1) Strength

Although there are differences among the Services in readiness reporting, total strength is the most important determinant of unit personnel readiness for all Services. From FY 1980 to FY 1982 active duty end strength increased by 58,500 personnel, or almost 3%. The Navy and Air Force have experienced the greatest growth, both in absolute and relative terms. For these Services, this is the result of both fuller manning of existing force structure units and the addition of new units to the force structure. The Army and Marines generally have held their force structure constant while increasing their manning. Both existing and new force structure units are better manned than in past practice.

TABLE II.C.7

Active Duty End Strength Growth
(FY 1980-82)

| | FY 1980 (Thousands) | FY 1982 (Thousands) | Change (Thousands) | Change (%) |
|---|---|---|---|---|
| Army | 776.5 | 780.4 | +3.9 | +0.5 |
| Navy | 527.2 | 553.0 | +25.8 | +4.9 |
| Air Force | 558.0 | 582.8 | +24.8 | +4.4 |
| Marine Corps | 188.5 | 192.4 | +3.9 | +2.1 |
| DoD Total | 2,050.1 | 2,108.6 | +58.5 | +2.9 |

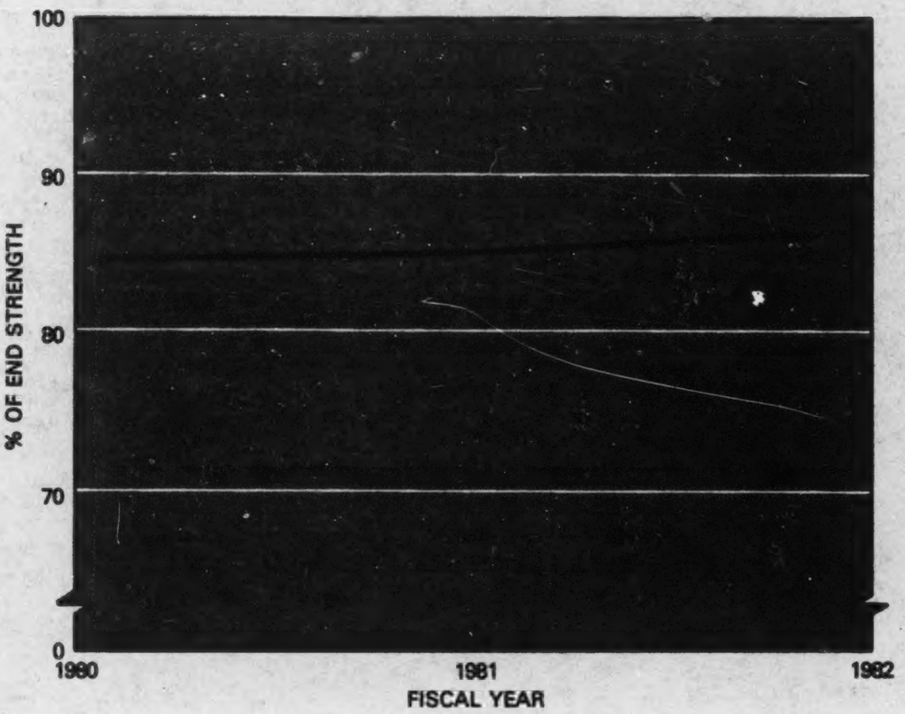
Our increase of 58,500 personnel "faces" supports a total increase of 86,000 new personnel "spaces." In other words, we have gained about 5% in force structure at the same time our end strength has risen by only 3% (see Chart II.C.1). Because of our success in reducing personnel overhead (transients, trainees, etc.), we can now use a larger proportion of our end strength to fill force structure billets.

### (2) Experience

Defined as the year-of-service and grade mix of the military population, experience also contributes to readiness. As the following discussion points out, we have observed improvements in the experience of both officer and enlisted personnel.

Chart II.C.1

## ACTIVE DUTY FORCE STRUCTURE AS A PERCENTAGE OF END STRENGTH FY 1980-82



(a) Officer

Since FY 1980, the total officer population has increased nearly 14,000, or over 5%. Two-thirds of this net increase (9,100) was among officers with more than four years of service, reflecting an improvement in retention. The career content (over four years of service) of our active duty officer corps is up by 4.8%. (See Chart II.C.2.)

The bulk of our growth in total officer population has been in the captain and major grades, indicating that more officers are electing to stay in the service at their career decision points (generally the fourth or fifth year of service). Furthermore, the number of senior officers is growing at a slower rate than is the total number of officers. The average grade of our officer population has remained unchanged for two years at roughly 0-3 (captain or, in the Navy, lieutenant). This means that officers have more years of service in grade.

(b) Enlisted

Similar trends are occurring in the enlisted force. The career force (more than four years of service) is increasing at a faster rate than the growth of the total enlisted population. Our inventory of non-commissioned officers (NCOs are grades E-5 through E-9) has increased by almost 38,000, or 5%. The break-out by Service in Table II.C.8 reflects dramatic gains in the Navy and Marine Corps, and lesser but substantial growth in the Army and Air Force.

TABLE II.C.8

Increase in NCO Inventory by Service
FY 1980-82

| Service | Number Increase | Per cent Increase |
|---|---|---|
| Army | 10,500 | 4.1 |
| Navy | 13,700 | 7.3 |
| Marine Corps | 6,900 | 14.5 |
| Air Force | 6,600 | 3.3 |
| Total DoD | 37,800 | 5.5 |

There are four major factors contributing to our enlisted gains.

-- First, as discussed earlier, all Services are meeting or exceeding the accession goals for non-prior service service (NPS) recruits.

-- Second, we regained some of the experience lost in the middle and late 1970s by enlisting more prior service personnel. Our prior service gains in FY 1982 totalled 32,500, exceeding our goal by nearly 14%.

Chart II.C.2

### OFFICER CAREER FORCE (OVER FOUR YEARS OF SERVICE) FY 1980-82

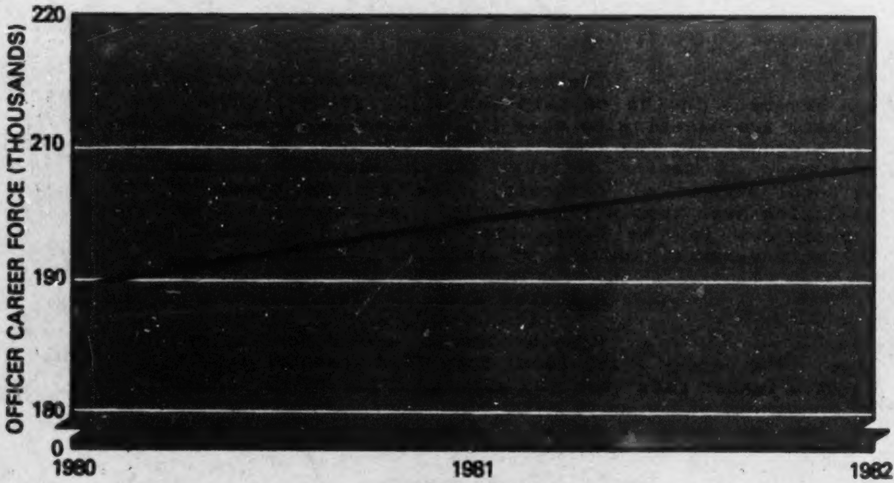
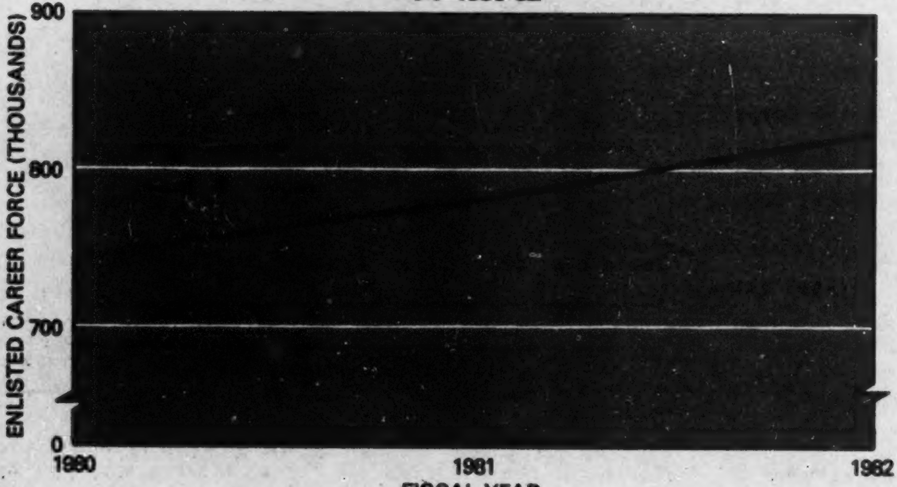


Chart II.C.3

### ENLISTED CAREER FORCE (OVER 4 YEARS OF SERVICE) FY 1980-82



-- Third, reenlistment rates are improving. Defined here as immediate continuous reenlistments as a percentage of eligibles, our reenlistment rate increased from 55% (190,000 reenlistments) in FY 1980 to 68% (224,000 reenlistments) in FY 1982.

-- Finally, we have reduced our attrition losses, evidenced by a 16% reduction in the three-year actual and projected loss rates for the FY 1980 and FY 1982 enlisted non-prior service cohorts. Leading in this improvement is the Army, where the loss rate has been reduced from 40% to 31%, and the Navy, which has lowered its loss rate from 26% to 24%.

### (3) Skills

Personnel readiness is also affected by the availability of personnel in needed skills at the unit level. Analysis shows recent gains in four skill areas that have contributed to degraded readiness in the past: pilots, combat arms personnel, electronics repairmen, and electrical/mechanical equipment repairmen. Table II.C.9 highlights these improvements in manning our most critical skills.

TABLE II.C.9

More Personnel in Needed Skills
(To Nearest 100)

| | FY 1980 | FY 1982* | GROWTH |
|---|---|---|---|
| OFFICER | | | |
| Pilots | | | |
| Navy/Marine Corps | 12,600 | 13,600 | 8% |
| Air Force | 16,900 | 17,500 | 3% |
| ENLISTED (E1-E9) | | | |
| Combat Arms | | | |
| Army | 156,200 | 165,600 | 6% |
| Marine Corps | 39,700 | 41,100 | 3% |
| Electronics Equipment Repairmen | 154,700 | 161,900 | 5% |
| Electrical/Mechanical Equipment Repairmen | 348,500 | 370,900 | 6% |

*Data are as of 30 June 1982

In addition to our improved manning of critical skills, we are maintaining high quality personnel in these skills. For example, among Army combat arms NCOs, 96% are high school graduates and above, with 40% in AFQT Categories I-IIIA; among Marine Corps combat arms NCOs, 93% are high school graduates and above, with 34% in AFQT Categories I-IIIA.

Four factors are responsible for the growth and quality we have achieved in these enlisted skills. First are the positive accession and retention trends previously cited. Second, our use of enlistment bonuses imposes an effective quality screen. This results in greater quality recruits entering training; in FY 1982, nearly 86% of all NPS accessions were high school diploma graduates. Third, we are offering more training in areas of greatest need. Since FY 1980, skill-related training man-years have increased by nearly 5,000 (4%). Since in this period the level of NPS accessions has declined, this means we are training people more intensively before assigning them to units. And finally, attrition during the first six months of service has dropped from 11.1% in FY 1980 to 10.6% in FY 1982. Because people who now start training are more likely to finish, our training resources can be used more efficiently.

### (4) Personnel Turnover

There are a number of reasons why reductions in personnel turnover contribute to improved readiness. Among these are:

- -- Cost avoidance: As turnover is reduced, fewer PCS moves are required to replace losses. 12,000 fewer individual moves in FY 1982 allowed a cost avoidance of about $26 million.
- -- Unit cohesion: Lower turnover means individuals stay together longer in units, improving their teamwork and mutual confidence.
- -- Operational benefits: Crew/team proficiency is increased, tactical competency is improved, the need for retraining is minimized, and operational efficiency and safety are enhanced.

Chart II.C.4 shows the reduction in the turnover rate of our active duty personnel during FY 1980-82, measured annually. Over this two-year period, the trend has clearly been toward greater stability.

Measured annually, turnover in the overall Service population has declined by 4.2%, with the following reductions reflected according to Service:

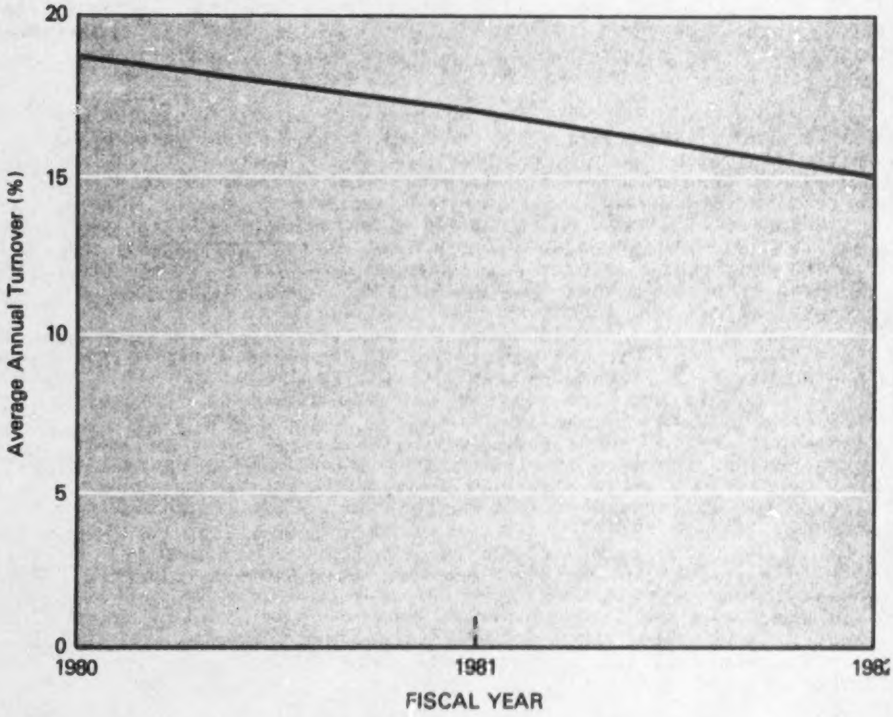
| | |
|---|---|
| Army | 5.8% |
| Navy | 1.6% |
| Marine Corps | 6.5% |
| Air Force | 3.9% |

Especially important is turnover of personnel in the combat arms skills, which has been reduced by 7.6% since FY 1980 compared to the overall reduction of 4.2%.

Among the factors contributing to lower turnover are fewer accessions, less attrition, and greater retention overall; Service management discipline; more personnel of higher quality, who are more likely to complete an enlistment and/or reenlist; and greater job satisfaction among our servicemembers.

Chart II.C.4

## PERSONNEL TURNOVER
## FY 1980-82



(5) Summary

In the past two years we have seen improvements in every dimension of personnel readiness: strength, experience, skill, and stability. The management emphasis by the Services and the Department of Defense has translated Congressional support for our personnel programs into increased military readiness.

c. Reserve Components

(1) Selected Reserve Unit Manpower

The Selected Reserve is at its highest strength level since 31 December 1967. During FY 1982, the Reserve Components enlisted 240,900 people, or 109% of their annual budget objective. Among all Reserve non-prior service (NPS) accessions in FY 1982, 72% were high school graduates and 87% scored average or above average (Categories I-III) on the entrance examination. Of this year's prior service (PS) enlistees, 89% were high school graduates, and 92% of all PS accessions scored in Categories I-III. There were slight increases in the number and proportion of blacks as well as female Reserve accessions during FY 1982.

The two Army Reserve Components experienced a 12-month growth of approximately 50,000 individuals. This increase in strength is due primarily to improved retention efforts, although the Army National Guard and the Army Reserve recruited 6,200 more individuals in FY 1982 than in FY 1981. In terms of quality, the Army Reserve improved significantly over FY 1981 by recruiting almost 7,000 more NPS accessions who were high school graduates and who scored in Categories I-III on the entrance examination during October through June of FY 1982.

In FY 1982, for the first time, the Army capped its Reserve Components strength because of funding constraints. Nevertheless, the trend in the Selected Reserve is favorable. We anticipate that by continuing our current incentive programs, and increasing efforts to combat attrition, we will substantially reduce our mobilization shortfall over time and be manned to meet our requirements during the 1980s.

(2) Pretrained Individual Manpower

Pretrained individual manpower consists of Individual Mobilization Augmentees (IMA) who are members of the Selected Reserve, members of the Individual Ready Reserve (IRR), members of the Inactive National Guard (ING), members of the Standby Reserve, and retired military personnel. Currently not enough manpower is available to meet the pretrained individual manpower mobilization requirement, and this continues to be an area of great concern. As members of the Selected Reserve, IMAs provide an immediate source of highly qualified pretrained manpower. The IMA program will expand from 7,800 in FY 1982 to a programmed strength of 10,700 in FY 1984. The IRR, the largest group within the pretrained individual manpower category, has increased from its low point of 342,000 in June 1978 to 395,796 as of September 1982. The decrease from the FY 1981 strength of 419,000 is attributable to improved active force retention and dramatic growth in the Selected Reserve. We anticipate further increases in the IRR, but they will not be enough to meet Army mobilization requirements. We are continuing a number of low cost or no cost initiatives that have had a positive effect. Some of these are:

- -- Screening of individuals leaving active duty and the Selected Reserve before the end of their obligated service to ensure that we transfer to the IRR those members who could be valuable mobilization assets and whose service has been honorable, with the remainder being discharged,
- -- Continuing the Army program for a two-year active duty enlistment that results in people spending more time in the IRR, and
- -- Streamlining mobilization procedures for Standby Reservists through legislation eliminating the requirement that the Director of Selective Service declare Standby Reservists available before DoD can mobilize them.

A comprehensive legislative package to improve IRR strength has been submitted to the Congress. It includes:

- -- Extension of the Military Service Obligation (MSO) from six to eight years, which will begin to solve the shortfall problem in FY 1990, and
- -- Enlistment and reenlistment incentives for joining or reenlisting in the IRR/ING. These incentives are designed to improve pretrained manpower strength until the eight-year MSO becomes effective.

We are also continuing the following initiatives to improve the management, training, and readiness of pretrained manpower. These initiatives are as follows:

- -- Extension to the other Services during FY 1982 of the Air Force's program of preassigning IMAs in peacetime to mobilization positions with active force organizations,
- -- Expansion of Service programs to identify the mobilization positions retirees can fill, to establish personnel files on retirees, and to assign retirees to mobilization positions, and
- -- Proposed legislation to extend full-time Servicemen's Group Life Insurance (SGLI) eligibility to the entire Ready Reserve, including the IRR. Currently, only members of the Selected Reserve are eligible for SGLI coverage.

### d. Civilians in the Department of Defense

#### (1) Overview of Civilian Requirements

There has been a tendency to perceive the Department's civilian workers as performing primarily bureaucratic overhead services. This perception is not founded in fact. Our requirements for civilian manpower are determined by our military capability objectives, our basic policies governing the use of uniformed personnel, and our programs for achieving efficient operations.

Basic government policy is to set the size of the uniformed services no larger than necessary to meet military contingencies and to support uniformed rotation and promotion requirements. DoD civilians perform administrative functions and we rely on either civilian employees or the private sector for commercial and industrial support functions. The choice depends on how critical the function is to mobilization and the comparative cost to the government of in-house versus contract provision of the services.

The majority of DoD civilian employment can be directly related to two of the major pillars of defense -- readiness and modernization. With regard to readiness, civilians are the primary resource in support of depot level maintenance of ships, aircraft, and weapon systems; full-time manning of the Reserve Forces; supply and distribution systems to support the logistics base; and base operations support. Civilians also contribute to readiness in the areas of medical care, communications, intelligence, and training. The thrust to modernize the Armed Forces relies heavily on those civilians employed in research and development functions and in procurement activities. The Department's civilians are truly an integral part of our total force defense posture.

### (2) Current End Strengths

In FY 1984, the DoD will employ 986,500 civilians directly and 85,700 indirectly for a total civilian workforce of 1,072,200. Indirect hire personnel are foreign nationals employed by their own country in support of U.S. forces in accordance with status of forces agreements. We reimburse the hiring country for their support.

Of the direct hire workforce, about 35% are Federal Wage System employees. These "blue collar" employees perform depot level maintenance, support supply and distribution operations, and maintain our installations. The remainder of the direct hire workforce are General Schedule employees who provide necessary scientific, engineering, professional, technical, administrative, and clerical support.

Our plan is to maintain a relatively constant civilian employment level in FY 1984. Table 3 in Appendix C of this report shows that we have increased the employment level above that maintained during the previous Administration. This is a reflection of our efforts to improve the national defense capability, and in particular, our emphasis on readiness. Between June 1970 and September 1980, the number of civilian direct hire employees declined greatly in response to reduced expenditures, employment ceilings, and hiring freezes. The resulting backlogs in depot, shipyard, and installation maintenance and increasing reliance on uniformed personnel to perform jobs that should have been performed by civilians reduced readiness and adversely affected the morale of the uniformed forces.

The FY 1981 budget supplement submitted by this Administration resulted in a 14,000 increase in FY 1981 direct hire civilian end strength employment. These civilian personnel increases were dedicated to reducing unacceptable backlogs in depot maintenance and to augmenting procurement, supply, and contract administration functions. An additional 5,600 indirect hires were employed to reduce the level of borrowed military manpower. In FY 1982 we used about half of the 2% flexibility granted to us by Congress to meet an increased workload in logistics and mapping, and to reduce unacceptable backlogs in investigations. During FY 1983, we anticipate growth in total employment. The actual end strength will depend on the actions of the industrially funded activities which, at the direction of Congress, are free of ceilings for this fiscal year.

### (3) Management Initiatives

#### (a) Commercial Activities

The Defense Department has been a government leader in reducing costs and manpower through the implementation of OMB Circular A-76. This allows the private sector to provide support services to the military if it can do so at a lower cost. During the period FY 1979 through FY 1981, we conducted over 400 bidding competitions and converted to contract the work performed by approximately 11,700 DoD employees. In 1983, we plan to complete cost comparison studies involving an additional 15,000 civilian and military positions to determine if the private sector can perform the services more cost efficiently. A lesser level of conversion effort is anticipated in the following years due to Congressional restrictions imposed in the FY 1983 Defense Authorization Act. For FY 1983, Congress has eliminated some of the burdensome reporting requirements. We recognize Congressional concerns about the programs and we have stopped the practice of deleting manpower spaces from the budget in anticipation of conversion to contract.

Our experience with the A-76 program indicates that over $14 million has been saved each year when facilities remained in-house after completion of an A-76 study. This is due to to the institution of streamlined organizations or procedures developed during the cost comparison study. As a consequence, we have instituted the Efficiency Review Program which will be applied to activities that are not contractable.

#### (b) Improving Productivity

We are aware of the continuing need for productivity improvement to realize the full potential of the DoD workforce. Productivity has been increasing at a rate of 2.1% annually since 1972. We expect to sustain this level through continuing successful programs, developing new initiatives, and sustaining management attention.

Productivity improvement efforts have focused on major productivity enhancing investments that release resources for high priority tasks. Under the Productivity Investment Fund (PIF), $129 million has been earmarked in FY 1984 for productivity enhancing capital investments (PECI) that we expect to produce a lifetime return on investment of approximately $11 for each $1 invested. Previous PIF projects for FY 1981-83 totaled $275 million and are anticipated to generate annual savings equivalent to 8,800 manpower spaces during the period FY 1982-88. We have structured these projected savings into our requirements. In addition to the PIF, which is sponsored by OSD, each Military Service will be encouraged to establish a minimum funding of $50 million to support PECI in their planning for FY 1985-89.

We also anticipate productivity growth to result from other productivity improvement initiatives. These include a DoD-wide Efficiency Review Program, increased use of computer-aided work measurement in developing labor standards, and broader application of various workforce motivation strategies.

(c) Efficiency Reviews

The Services will be conducting reviews of those commercial activities that must remain in-house for national defense reasons. The objective is to determine if these defense activities can be performed more efficiently. This program uses the review process now employed in the A-76 Commercial Activities program, including the development of a Performance Work Statement (PWS) that clearly describes the work to be accomplished and the performance standards to be met. After the PWS is written and accepted, review and analysis of the operation can increase productivity and reduce operating costs by eliminating unnecessary and inefficient work practices. It is estimated that it will take approximately six or seven years to review all commercial activities. Combat activities designed for deployment are exempt from these reviews. We envision savings of over 3,000 spaces resulting from this program in FY 1984.

(d) Inter-Service Support

DoD Components are also ascertaining if duplication of services can be eliminated and economies realized through inter-service and intra-service support agreements. These agreements establish single managers to perform specific base operating support functions to meet the requirements of each military installation in a particular geographic area. Our goal is to save $30 million in each of the next five years beginning in FY 1983.

(e) Management Incentives

We also plan to experiment with several management incentive ideas to encourage defense managers to be more efficient and cost-effective. These will include differentially allocating civilian end strengths to reward those components that do a superior job in achieving more efficient operations. In addition, we plan to coordinate the introduction of new legislation with the Office of Personnel Management. This will be done after we complete our review of the Navy's personnel management demonstration project to extend the benefits of this Civil Service Reform Act project into a permanent performance-based compensation program.

e. Health and Medical Resources

(1) Wartime Medical Posture

(a) Personnel

The number and types of medical personnel in the Active and Reserve Components fall far short of the total projected wartime requirements. We have embarked on aggressive programs to increase the wartime availability of pretrained medical personnel for both our continental United States and our overseas medical treatment facilities.

Among the initiatives under consideration is pre-contracting with civilian health care personnel in peacetime to serve in stateside hospitals in wartime. Success with this initiative would free more Active and Reserve medical personnel for deployment to the operational theater. Contract personnel would remain at the stateside facilities until relieved by military health care personnel acquired through voluntary accession or induction.

We have also been working on a proposal to amend the Military Selective Service Act to allow for the specific registration, classification, and induction of health care personnel in a declared national emergency. Enactment of the proposal would provide an incentive for voluntary enlistments as well as a backup if the voluntary programs are unsuccessful.

Since the Reserve Components can be expected to provide up to two-thirds of military medical manpower subsequent to mobilization, we have been actively involved in medical readiness enhancement initiatives in this vital area.

### (b) Hospital Ship

A hospital ship capability is an absolutely essential component of medical support for rapid deployment forces, because it alone can ensure that care will be available for our casualties from the beginning of combat operations. Last year, the minimum capability required for this mission was identified as 24 operating rooms and 2,000 hospital beds, and funds were budgeted in FY 1983 and programmed in FY 1984 to procure that capability. In FY 1983, a final contract will be awarded for conversion of one ship, which will provide half of the capability by 1985. A second ship will subsequently be procured, and will become available by mid-to-late 1986.

### (c) Civilian-Military Contingency Hospital System

The Civilian-Military Contingency Hospital System has been implemented in 48 areas of the continental United States. To date, over 50,000 beds have been committed by civilian hospitals as backup medical support to DoD. The Veterans Administration has begun planning to incorporate its stateside medical centers into the contingency hospital system. This joint effort of military, Veterans Administration, and civilian hospitals will ensure medical care is readily available to military patients returning from any future overseas conflict.

### (2) Peacetime Medical Posture

In peacetime, the military health services system has a dual role: to provide a source of trained health professionals ready to deploy during mobilization and to provide a source of quality medical care to active duty and retired personnel and their dependents. Health care for people is an integral component of military personnel compensation policy and is provided through a direct-care system of military hospitals and clinics and through the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS).

Our goal is to make this system as cost-effective as possible, while still satisfying both mobilization and compensation requirements.

## f. Personnel Management

### (1) Composition and Distribution of the Active and Selected Reserve Forces

### (a) Active Forces

In FY 1982, 30.3% of the enlisted force were minority personnel (22.0% black, 4.0% Hispanic and 4.2% others). The Army (41.2%) has historically had the highest minority content, and the Navy (21.4%) has had the lowest. Chart II.C.5 shows the percentage of minorities in the active duty enlisted force by Service during the period FY 1971-82. The increase since 1972 is a product of both increasing accession rates and higher than average reenlistment rates. During this eleven-year period, minority enlisted women increased from 0.2% to approximately 3.1% of the total enlisted force and from 18.7% of the total number of enlisted women in FY 1971 to 34.4% in FY 1982.

In FY 1982, 10.1% of the officer force were minority personnel (5.6% black, 1.3% Hispanic, and 3.2% other). As with the enlisted strength, the Army (14.4%) has historically had the highest minority content. Chart II.C.6 shows the percentage of minorities in the officer force by Service during the period FY 1971-82. The number of minority women in the total active officer force increased from 0.2% in 1971 to approximately 1.6% in FY 1982; and from 5.5% of the total number of active women officers in FY 1971 to 17.7% in FY 1982. The significant minority strength increases over the eleven-year period reflect the intensive procurement and equal opportunity efforts by all Services. The percentage of all active duty officers who are black has more than doubled since 1971, when it was 2.2% (now 5.6%).

### (b) Selected Reserve Forces

The proportion of enlisted minorities in the Selected Reserve has continued to increase. In FY 1971, the enlisted minority content was less than 4%. In FY 1982, the content reached 26.6%, of which 18.5% were blacks, 5.7% were Hispanic, and 2.4%, other. The Army Reserve has the highest minority content (33.7%); the Naval Reserve, the lowest with 13.3%. Approximately 3.5% of the total Selected Reserve enlisted force are minority women; however, minority women make up 37% of all females in the enlisted force.

Minority officers make up 7.7% of the Selected Reserve officer force (blacks, 4.3%; Hispanics, 1.7%; and other, 1.7%). The Army National Guard has the highest percentage of minorities (10.1%). The Naval Reserve has the lowest minority content of 2.4% (1.3% black, 0.2% Hispanic, and 0.9% other). Minority women make up 1.4% of all officers in the Selected Reserve Force and 16.7% of all female officers. The percentage of minority officers in the Selected Reserve forces has significantly increased since FY 1971, but still remains below our desired levels.

### (2) Women in the Military

Military women in all Services are fulfilling vital military requirements with the same high degree of competence as military men. Today, over 190,000 women -- officer and enlisted -- account for about 9% of the active force compared to 1972 when

Chart II.C.5

## MINORITIES AS A PERCENTAGE OF ACTIVE DUTY ENLISTED END STRENGTHS

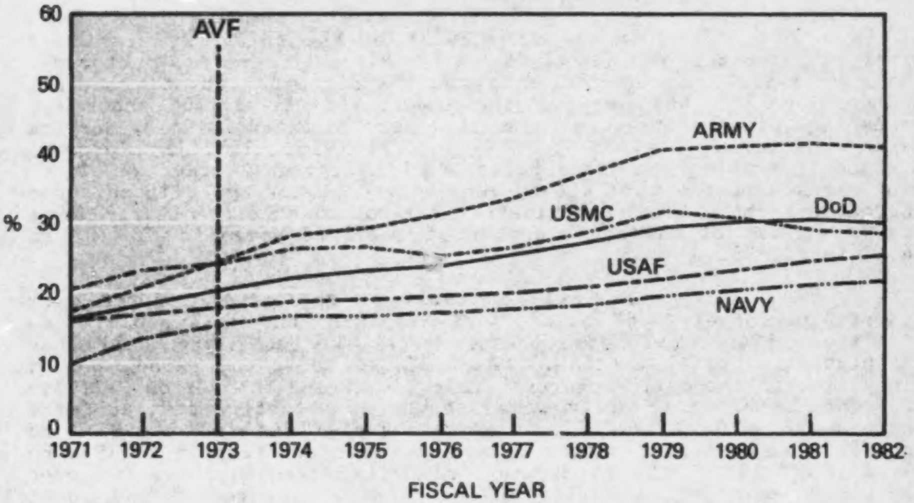
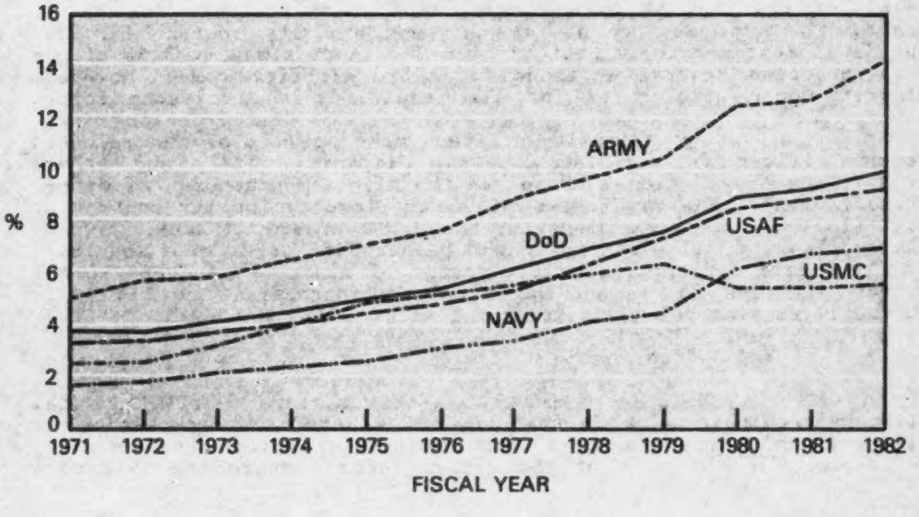


Chart II.C.6

## MINORITIES AS A PERCENTAGE OF ACTIVE DUTY OFFICER END STRENGTHS



45,000 women made up 1.5% of the active force. Current enlisted women strengths and a projection are given below:

TABLE II.C.10

Active Duty Enlisted Women
(End Strength in Thousands)

| | September 1982 End Strength | Per cent | Projected FY 1987 End Strength | Per cent |
|---|---|---|---|---|
| Army | 63.6 | 9.5 | 70.0 | 10.0 |
| Navy | 37.1 | 7.7 | 45.0 | 8.7 |
| Marine Corps | 7.9 | 4.5 | 8.9 | 4.5 |
| Air Force | 54.0 | 11.3 | 63.0 | 11.4 |
| TOTAL | 162.6 | 9.1 | 186.9 | 9.6 |

We expect the number of enlisted military women to continue to increase over the next five years as it has every year since 1964. By 1987, the number of women officers will grow to over 31,000 from 25,000 in 1982. Based on projections of separations for completion of service commitment, attrition, reenlistments, and extensions, the Department of Defense will recruit about 39,000 enlisted women annually to sustain the projected women end strengths.

As a result of past rapid growth, 97% of all military women have less than ten years of service and about 75% less than five years. Comparable figures for men are 75% and 55%, respectively. Our planned rate of increase over the next five years will permit the experience distribution of military women to approximate more nearly that of military men. During this period more women will enter senior officer and enlisted leadership and management positions, facilitating the integration of women into the military.

The Services are striving to alleviate discrimination barriers, affording women a wide range of opportunities and competitive advancement, and maintaining a personnel mix capable of satisfying combat requirements and providing career development. The Services manage their forces toward these ends within the constraints of current legislation. The Department will continue to strive for a combat-ready force that provides equality of opportunity for all service members within career fields for which they are physically and mentally qualified. I am committed to increasing the role of women in the military and ensuring that women are not subject to discrimination in recruiting or career opportunities.

### (3) General and Flag Officer Strengths

In March 1982 we submitted legislation entitled the "Flag and General Officer Management Act of 1982" for consideration by the Congress. The proposal complements previous efforts undertaken by the Department of Defense which included: (a) the standardization of promotion and tenure provisions and the reinstitution of the grade of commodore for the Navy in the recently enacted Defense Officer Personnel Management Act (DOPMA) and (b) proposed legislation to repeal minimum grade requirements for certain general and flag officers (S.1906), currently pending floor action in the Senate. It is the final piece of comprehensive legislation required of the Department of Defense to comply fully with guidelines established in section 1003 of the Defense Appropriations Authorization Act for FY 1981.

The purpose of the proposed legislation is to establish a management framework in law for flag and general officers that is responsive to both the needs of the Department of Defense and the desires of the Congress. Toward this end, the proposed legislation establishes a uniform system of accounting for flag and general officer requirements based on utilization; a rational methodology for determining flag and general officer ceilings based on structure, strength, and non-direct mission categories; a standardized system for annual review, validation, and reporting of flag and general officer requirements; and a more clearly defined structure for Departmental control over flag and general officer authorizations. As conceived, the proposed system will provide the necessary oversight, flexibility, and responsiveness required to control changing flag and general officer requirements in support of national security objectives.

We solicit your support in this much needed and long overdue effort.

### 3. Conclusion

We believe that, despite the absence of an October 1983 pay raise, the FY 1984 manpower program can meet the needs of the All-Volunteer Force, although there is some risk involved. The program continues our efforts to ensure full use of civilians in essential jobs not requiring military people, to increase productivity and operational efficiencies, and to improve the quality of life of our military personnel and their families.

## D. INDUSTRIAL RESPONSIVENESS

### 1. Introduction

A key part of the efforts to rebuild our defense forces is the improvement of industrial responsiveness, for only when American industry has the capability to modernize and expand production to meet increased demands for weapon systems and supplies during times of emergency can we confidently face today's rapidly changing world conditions. We also recognize the vital role that industry must play in developing a capability to surge industrial production, and we are continuing to improve our relationship as partners in the support of our national defense.

Many studies and reports have documented the decline of our national industrial base. The problems in the defense sector of industry are a subset of the problems faced by the entire industrial sector. While the President's economic recovery program includes the mechanisms required to stimulate capital investment by the private sector, general economic conditions have slowed investments to a lower level than we had hoped. We believe that improvement in industrial conditions as a whole will bring about improvements in the production of weapon systems.

It is our desire to create an attractive climate for capital investment by the private sector. While we have not fully attained all of our goals in this respect, we have made significant strides through:

-- Development and publication of new defense guidance and the provision of increased funding levels for industrial preparedness programs,

-- Increases in appropriations for the Manufacturing Technology Program to assist in the implementation and application of advanced technologies and processes,

-- Improvements in the management of industrial property in the possession of defense contractors to simplify methods and reduce costs,

-- Sector analyses to review erosion of the industrial base to determine the need for import relief,

-- Establishment of a formal program to encourage productivity improvements in the private sector, and

-- Development of the Defense Economic Impact Modeling System to delineate the impact of defense requirements on manufacturing capacity.

### 2. Current Programs

#### a. Industrial Base Guidance and Funding

In March 1982, we issued revised industrial base guidance, the major objectives of which are to:

- -- Develop an industrial base capability to produce and deliver our five-year peacetime procurement program efficiently, effectively, and as quickly as possible;
- -- Develop an industrial base capability to provide surge responsiveness for selected critical systems/ items;
- -- Develop an industrial capability that will permit accelerating the attainment of our programmed sustainability levels for selected critical systems/items, and
- -- Increase funding for industrial preparedness planning to levels required to accomplish the first three objectives and integrate industrial preparedness resource requirements into the Planning, Programming, and Budgeting System (PPBS).

As a result of this new guidance, the Military Departments have taken actions to weave industrial base considerations into the acquisition process, revitalize industrial preparedness planning, and show industry, through planning and actions, that industrial preparedness is an integral part of acquisition. This is reflected in the almost fourfold increase in funding forecast for industrial preparedness over the next five years.

### b. The Defense Production Act

The Defense Production Act provides the principal authority for vital readiness programs directed toward maintaining the national defense industrial base for peacetime, surge, and national emergency requirements. Over the past 30 years, we have relied heavily on the Defense Production Act to maintain ongoing defense contracting and preparedness programs in support of our national security objectives. With the Title I authority provided to us, we have supported those weapon system production schedules and deployments that are subject to disruption or delay when competition for resources exists. The Defense Production Act is essential to defense readiness.

Title III of the Act permits the use of government funds in extraordinary situations as incentives to create new, or expand existing, industrial capabilities to meet national security needs. A contract was recently awarded to the Gila River Indian Community to establish a demonstration domestic guayule (natural rubber) industry as a means of reducing our dependence on foreign sources for our supply of rubber.

### c. National Defense Stockpile

The fundamental purpose of the stockpile, which is managed by the Federal Emergency Management Agency, is to ensure that our government will have available critical raw materials to support the military, industrial, and civilian needs of the U.S. for its national defense.

#### (1) Critical Raw Materials Status

Under the National Materials and Minerals Policy, Research, and Development Act of 1980 (P.L. 96-479), we have assessed our raw materials situation. Our requirements have been included in the President's National Materials and Minerals Program Plan and

Report, which was sent to Congress on 5 April 1982. This report established the first national minerals policy and generated several actions to reduce the nation's vulnerability.

(2) Foreign Dependence

Although we are dependent upon foreign sources for many raw materials, we have also been experiencing a significant decrease in domestic capabilities to process and manufacture industrial products. We are exploring methods of restoring domestic industrial capabilities in critical areas of foreign dependence which can be damaging to the national security.

d. Manufacturing Technology Program

The Manufacturing Technology Program is a broad-based program designed to improve the productivity and responsiveness of the defense industrial base. Investments made by this predominantly procurement-funded program are expected to result in factory floor applications of productivityenhancing technology. This program will continue to receive priority emphasis.

e. Industrial Property Management

Government-owned industrial property is provided to contractors to assist in the production of defense requirements when it is necessary and in the government's best interest. The acquisition cost of government-owned industrial property in the possession of defense contractors is in excess of $36 billion. During FY 1982, we took a number of actions to streamline the management of this property and to reduce costs for both the government and the contractors by reducing the scope and intensity of management for selected items, developing an automated information system for property management and oversight, and restructuring the reserve of industrial equipment. We have also formed a senior-level Defense Industrial Property Council to ensure effective and efficient property management.

f. Government-Industry Relations

An important part of our overall effort to revitalize the industrial base is the communication of potential defense requirements to the private sector. The following are examples of accomplishments in this area:

-- The Defense Economic Impact Modeling System is a methodology whereby projected defense requirements, by industrial sectors, are developed and made available to industry as well as in-house analysts. This information can be used to avoid production bottlenecks and limit excessive cost increases caused by shortages of industrial capacity.

-- We have provided the public and private sectors with projected defense and non-defense manpower requirements for 72 skilled labor categories to alleviate current and potential shortages of skilled manpower and to encourage job entrants.

-- The Machine Tool Trigger Order Program is a cooperative effort by government and industry to reduce mobilization lead times by accelerating delivery of machine tools essential to defense production. The program employs standby purchase agreements with machine tool industry members for anticipated mobilization capital equipment needs. The dollar value of agreements to be signed over the next three years is estimated at $1.5 billion.

### g. Industrial Productivity

The Department of Defense is committed to national efforts to improve productivity; we have, therefore, established an Office for Industrial Productivity to foster increased efficiencies and productivity throughout the defense sector of U.S. industry. This office will focus on broad, generic issues and long-range planning to achieve productivity increases, with initial efforts concentrated on contract incentives and on acquisition policies and strategies. It will serve as a focal point for industry and other government agencies for national productivity improvement efforts and will provide extensive liaison with the Military Services, industry groups, and other interested offices within the Department of Defense.

### h. Mobilization Force Expansion Planning

Two parallel efforts are under way to develop specific mobilization resource requirements, including industrial requirements, for planning purposes. Within the Emergency Mobilization Preparedness Board's Military Mobilization and Industrial Mobilization Working Groups (see the Mobilization chapter), we are determining the resource requirements associated with fully mobilizing the existing force structure. Within the Department, we have begun to develop the industrial requirements for mobilization expansion of the armed forces. Both of these programs will ultimately lead to specific planning requirements for the industrial base and to rationalized force expansion plans.

## 3. Conclusion

During the past year, we have taken a number of major steps to improve our industrial responsiveness. In several areas we have increased our commitment to improve the nation's defense posture and the ability to respond to any national emergency. We have continued to enhance our relationship with the industrial sector through cooperative efforts in the areas of surge and mobilization planning and through measures that provide better definition of projected requirements and lend stability to defense programs. Increased funding for the Manufacturing Technology Program and the data provided by the Defense Economic Impact Modeling System are two of the actions that give DoD contractors and suppliers confidence that we are taking seriously the need to revitalize the industrial base. This assurance should encourage the investment of private capital to modernize outdated plants and equipment which will, in turn, improve productivity and increase industrial responsiveness while reducing weapon systems acquisition costs. We have made substantial progress toward our goals; however, there is a long way to go and there must be a continued commitment if we are to develop and maintain a strong industrial base.

## A. LAND FORCES

### 1. Introduction

#### a. Force Rationale

Our land forces comprise the active and reserve forces of the Army and the Marine Corps. These forces are designed to assist in deterring war; should deterrence fail, they are structured and equipped to conduct ground combat to defeat the enemy. To meet these objectives, we maintain deployments in Europe and the western Pacific, forward deployments afloat, and rapidly deployable forces -- both active and reserve -- in the United States. Our land forces provide the capability to engage an enemy at all levels of conflict -- from counter-terrorism operations to full-scale combat against a heavily armed opponent.

It is the latter that poses the most serious challenge. Meeting that challenge accounts for the largest single element of our active land forces -- the Army's armored and mechanized divisions. These are designed and equipped to contend with a modern, tactically mobile and firepower-intense opponent. A smaller but still substantial portion of the force -- including the Army's 82nd Airborne Division, the 101st Airborne (Air Assault) Division, ranger battalions, and the three active Marine divisions -- is configured and trained primarily for rapid-response and forcible-entry operations worldwide. These forces are dependent on timely reinforcement and logistics support to conduct sustained combat operations. In structuring our land forces, we seek to strike an appropriate balance between heavy (armored/mechanized) and light forces to meet the objectives just outlined and to make best use of our limited airlift and sealift capabilities.

#### b. Program Goals

For our land forces to provide the capabilities we need, they must be:

-- Properly structured,

-- Able to respond quickly,

-- Capable of sustained combat, and

-- Equipped with modern weapons.

Our five-year program for land forces focuses on these objectives.

Of particular importance is modern equipment. Land forces were hit hard by the spending cutbacks of the 1970s. This resulted in inadequate procurement of existing and modernized equipment. Our five-year program aims to offset the trends of the 1970s and to enhance the capability of our land forces to respond effectively to multiple contingencies throughout the world.

#### c. Force Composition

By the end of FY 1984, our planned land force structure will consist of 29 divisions: 19 active divisions (16 Army and 3 Marine Corps) and 10 Reserve Component divisions (9 Army and 1 Marine

Corps). These divisions (about 18,000 men each), supplemented by separate nondivisional brigades and regiments (4,000-5,000 men each), form the cutting edge of our land forces. They are supported by a wide variety of active and reserve units and are backed by an extensive training and support base.

Our active forces continue to rely on the Reserve Components to achieve their full combat potential. Of our 19 active divisions, 10 will require roundout by reserve combat battalions and brigades to reach their full complement. In addition, a large number of service support units needed for early deployment of the active force are also in the Reserve Components.

### d. Force Disposition

Chart III.A.1 depicts the location of all active and reserve Army and Marine Corps divisions at the end of FY 1983. In addition to the major deployments shown, two brigades of CONUS-based Army divisions are forward-deployed in Europe, and one Marine Brigade is stationed in Hawaii. The Army also maintains three separate brigades and regiments in Europe, four active and 21 reserve brigades and regiments in CONUS (not involved in roundout), and one active brigade in both Panama and Alaska.

## 2. FY 1984-88 Program

### a. Force Structure

FY 1984 will be a year of major change in our active land force structure. Major initiatives include:

-- Continuing the reorganization of our armored and mechanized divisions aimed at optimizing our force modernization effort, and

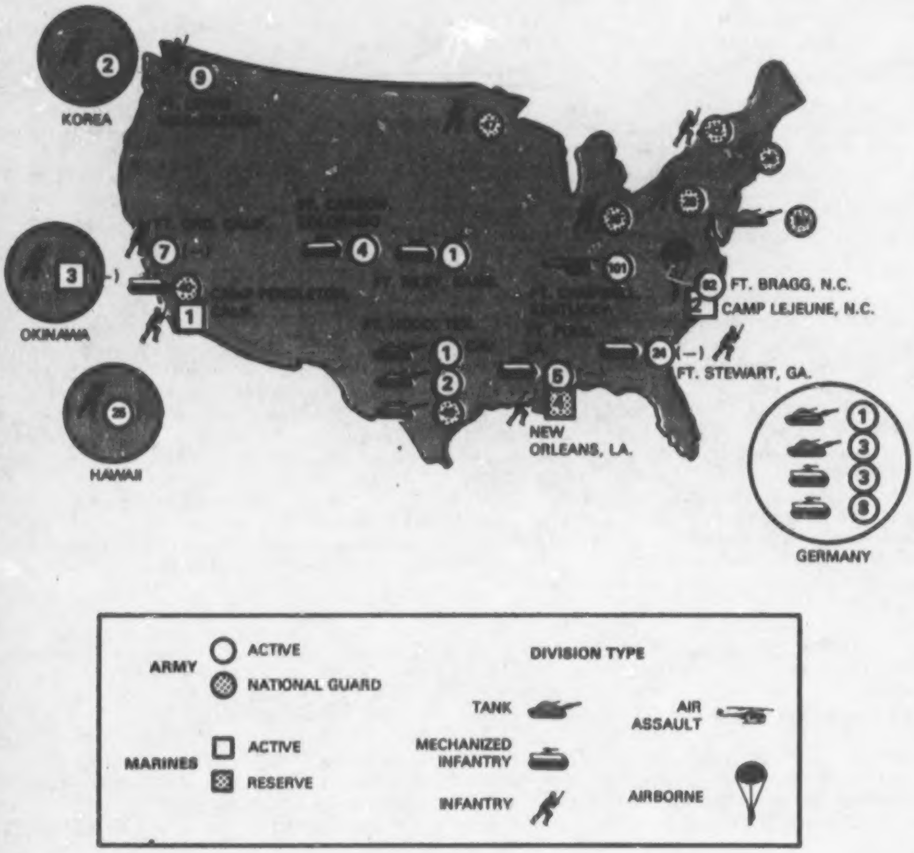
-- Increasing the support structure of the active force while depending on the reserve components to round out active combat structure.

Most of our armored and mechanized divisions will convert to either the final Division 86 force structure or an interim configuration designed to ease the transition to the final structure. This reorganization will increase the number of maneuver companies in each maneuver battalion from three to four, while reducing the number of maneuver battalions per division (e.g., from 11 to 10 in our European-based divisions). At the same time, we will activate 45 new active units, thus significantly increasing our ammunition-handling capacity, air defense capabilities, and -- most significant -- our special forces.

In order to improve the capability of our Special Operations Forces (SOF) to meet threats at the lower end of the conflict spectrum -- where the use of conventional forces may be premature, inappropriate, or politically infeasible -- the Army will activate an additional Special Forces (SF) group headquarters and two SF battalions in FY 1984. This increase will improve SF effectiveness by permitting units to tailor individual training and mission preparation for operations in specific regions of the world. In another move to improve SOF capabilities, the Army has established a major headquarters, the 1st Special Operations Command (SOCOM), which will consolidate management of all SOF assets.

Chart III.A.1

## DEPLOYMENT OF U.S. DIVISIONS


KOREA
2
9
FT. LEWIS WASHINGTON
FT. ORD, CALIF.
7 (–)
OKINAWA
3 (–)
CAMP PENDLETON, CALIF.
40
1
HAWAII
25
FT. CARSON, COLORADO
4
1
FT. RILEY, KANS.
FT. HOOD, TEX.
1 CAV
2
FT. CAMPBELL, KENTUCKY
101
FT. POLK, LA.
5
4
NEW ORLEANS, LA.
82 FT. BRAGG, N.C.
2 CAMP LEJEUNE, N.C.
24 (–)
FT. STEWART, GA.
1
3
3
8
GERMANY
ARMY
ACTIVE
NATIONAL GUARD
MARINES
ACTIVE
RESERVE
DIVISION TYPE
TANK
MECHANIZED INFANTRY
INFANTRY
AIR ASSAULT
AIRBORNE

FY 1984 will also witness important changes in our Reserve Component force structure. We plan to begin a two-year expansion of the Army Reserve Component Roundout Program. By year's end, all non-deployed active Army divisions (except the 82nd Airborne and 101st Air Assault Divisions) will be rounded out by reserve combat units. The number of divisions with roundout by brigade-sized units will increase. We also plan to expand the roundout program to other combat units, as well as to combat support and combat service support units.

Also in FY 1984, the Army plans to form a new National Guard division. This division will consolidate three existing separate brigades. We are presently considering several possible states in which to base the division, and will announce our decision later this year. We plan to activate the division headquarters and headquarters company in late FY 1984 and the remaining elements beginning in FY 1985.

A priority effort is the modernization of the Army's light infantry forces through the High Technology Test Bed (HTTB) project. The 9th Infantry Division at Fort Lewis, Washington was designated as the HTTB in June 1980. This initiative will provide a more strategically deployable and mobile prototype High Technology Light Division (HTLD) in FY 1986. The Army's initial force modernization effort was centered on heavy divisions; the HTTB effort focuses on the light division in an attempt to modernize divisions of both types beginning in the mid-1980s. Additionally, this program will permit us to accelerate both the acquisition cycle and the force development process, leading to more cost-effective and efficient systems. The entire process is being streamlined to allow for early fielding, and funds have been programmed to support many of the HTTB and HTLD initiatives (e.g., the light armored vehicle and the fast attack vehicle).

Complementing these force structure changes are a number of ongoing programs to which we attach high priority. Our efforts to increase the density of howitzers in Army artillery battalions continue. We are also completing the reorganization of the 101st Air Assault Division to increase its combat capabilities.

During the coming year, the Marine Corps, like the Army, will continue to increase the combat capability of its forces. For example, the Marine Corps is moving steadily toward its goal of doubling each Marine division's anti-tank capability by FY 1986.

### b. Readiness

The emphasis on force readiness begun last year continues in the FY 1984-88 program. The materiel readiness of our land forces will be improved both by the acquisition of more and better equipment and by continued attention to keeping maintenance backlogs of current equipment at low levels. Army training programs will be significantly strengthened by the provision of more training equipment and instructors to the training base, increased rotation of battalions to the National Training Center, and expanded participation in Joint Chiefs of Staff (JCS)-sponsored exercises. The Marine Corps will continue to emphasize training for amphibious operations and subsequent operations ashore over a wide range of geographic and climatic conditions.

Our ability to deploy our land forces rapidly to trouble spots around the world will be enhanced by continued increases in the lift capability of our Air Force and Navy strategic mobility forces. We will reduce the time required to deploy our combat forces by continuing our prepositioning programs.

c. Sustainability

Our ability to sustain our land forces in combat is a function of the amount of replacement equipment, spare parts, medical supplies, ammunition, fuel, and other consumables that we have stockpiled for them in peacetime. Our FY 1984-88 program continues an effort begun last year to build up our inventory of war reserve munitions to a level sufficient to sustain U.S. forces in Europe and Southwest Asia, and U.S. and Republic of Korea (ROK) forces in Korea, for 60 days. Our procurement schedule will allow us to approach that goal for most items. We are also increasing the "go-to-war" stocks of spare parts for our rapid deployment forces and for those units scheduled to engage in NATO and are building war reserve stocks of those items to match the sustainability objectives specified for munitions.

Our FY 1984-88 procurement program has been carefully structured to achieve needed modernization of major items of equipment, while continuing to improve the readiness and sustainability of our land forces. We are also increasing our war reserve stocks of bulk petroleum on a schedule that will eliminate known shortages by the end of the FY 1987 FDP.

d. Modernization

(1) Close Combat

Improving the capability of our land forces to defeat enemy forces in close combat continues to be a top priority of our modernization program. Soviet advances in armored warfare require that we develop and field improved weapon systems capable of defeating heavily armored forces on the modern battlefield. Accordingly, our FY 1984-88 program emphasizes the continued acquisition of systems that will enhance the firepower, tactical mobility, and survivability of our ground combat forces.

M1 Abrams Tank -- M1 production continues at a rate of 60 per month with the Army's M1 acquisition objective of 7,058 tanks anticipated by the end of the FY 1990 FDP. We currently plan to begin deploying an improved version of the M1 (designated M1E1) with a 120mm main gun in late FY 1985. Approximately 51% of the total M1 force will be equipped with this larger gun.

M60A3 Modification Program -- The Army currently has about 5,000 M60A1 tanks in its inventory. To improve the tank's combat effectiveness against the Soviet threat, we are continuing a modification program to upgrade our M60A1 tanks to the M60A3 configuration. The program includes a number of combat effectiveness improvements such as new fire control components (laser rangefinder, solid-state computer, tank thermal sight, and turret stabilization system) and selected engine improvements to increase its reliability. The Army had converted 455 tanks to the M60A3 configuration by the end of FY 1982 and plans to convert 569 more in FY 1983. We are requesting funds to continue the modification program during FY 1984-88 at a planned rate of about 460 conversions per year.

The Bradley Fighting Vehicle System BFVS) -- The first production BFVS -- the Army's new armored personnel carrier -- was delivered in May 1981. By the end of the FY 1983 FDP, the Army will have received a total of 1,700 of these vehicles. Our FY 1984-88 program proposes to increase the BFVS production rate to a maximum of 90 vehicles per month by the end of FY 1986. This production schedule will allow the Army to achieve its acquisition objective of 6,882 BFVSs by the end of the FY 1989 FDP.

Assault Amphibian Vehicle (LVT) -- The Marine Corps will continue its program to procure additional assault amphibian vehicles (LVT7 product-improved version) to support maritime prepositioning requirements for three brigades. Funding for the final 153 units is requested in FY 1984. Concurrently, it will continue a service life extension program through FY 1985 to improve its existing LVT7 fleet.

Light Armored Vehicle (LAV) -- The Army and Marine Corps have begun joint procurement of a common light armored vehicle to increase the ground combat mobility, survivability, and firepower of their light infantry forces. The LAV will be equipped with a 25mm automatic cannon. Each Service will use the basic vehicle selected as a result of joint testing to derive variants tailored to its specific needs. The current program provides for procurement of 969 LAVs (680 for the Army and 289 for the Marine Corps) during FY 1982-86.

TOW Missile System -- The Army and Marine Corps have programmed funds to continue procurement of an improved version of the TOW anti-tank missile incorporating an improved warhead and guidance system. In addition, a new version of TOW (TOW 2), designed to be capable of defeating advanced-technology armor, is scheduled for initial delivery in the early 1980s.

Light Anti-tank Weapon System -- The Viper Improved Light Anti-Armor Weapon (ILAW) is the proposed replacement for the M72A3 LAW currently in use by the Army and Marine Corps. The ILAW has a shorter range and is lighter than the TOW and DRAGON. Additionally, it will not have a dedicated gunner but will be issued to soldiers and marines as an item of ammunition on an as-needed basis. The FY 1981 budget funded low-rate initial production of 1,400 rounds, to be delivered between November 1982 and March 1983. In view of Congressional concerns with the system's performance during initial tests and its projected cost, we have scheduled further testing to determine if a more cost-effective alternative can be identified. The Army and Marine Corps will conduct joint tests of foreign and domestic ILAW candidates during FY 1983, and will decide whether to proceed with full-scale production of Viper, or to pursue an alterative ILAW, upon completion of the testing program later in the year.

|  | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| **M1 Tank** |  |  |  |  |
| Development: |  |  |  |  |
| $ Millions | 133.5 | 107.9 | 92.3 | 51.8 |
| Procurement: |  |  |  |  |
| Quantity | 700 | 855 | 720 | 720 |
| $ Millions | 1,570.3 | 2,035.5 | 1,757.3 | 1,759.7 |
| **M60A3 Modification** |  |  |  |  |
| Procurement: |  |  |  |  |
| Quantity | 534 | 460 | 460 | 460 |
| $ Millions | 146.6 | 162.9 | 189.1 | 204.0 |
| **BFVS** |  |  |  |  |
| Development: |  |  |  |  |
| $ Millions | 107.6 | 50.3 | 19.4 | 37.6 |
| Procurement: |  |  |  |  |
| Quantity | 600 | 600 | 600 | 830 |
| $ Millions | 898.7 | 870.6 | 858.3 | 1,111.4 |
| **LVT** |  |  |  |  |
| Procurement: |  |  |  |  |
| Quantity | 30 | 146 | 153 | -- |
| $ Millions | 71.8 | 145.2 | 115.3 | -- |
| **TOW Missile** |  |  |  |  |
| Development: |  |  |  |  |
| $ Millions | 6.7 | 2.0 | 1.9 | 3.9 |
| Procurement: |  |  |  |  |
| Quantity | 12,674 | 13,000 | 20,200 | 21,028 |
| $ Millions | 151.8 | 162.0 | 243.4 | 282.3 |
| **Light Anti-Tank Weapon** |  |  |  |  |
| Development: |  |  |  |  |
| $ Millions | 10.0 | 10.0 | -- | -- |
| Procurement: |  |  |  |  |
| Quantity | 60,000 | -- | -- | 104,156 |
| $ Millions | 98.6 | -- | -- | 132.9 |

### (2) Land Forces Aviation

#### (a) Helicopters

The Army and Marine Corps maintain a versatile fleet of helicopters to support their combined arms team. These helicopters will provide an essential measure of firepower and tactical mobility to our ground combat units. We will rely on them to help detect and defeat enemy armored forces and to transport our troops within combat theaters. To improve their capabilities in each of these mission areas, our FY 1984-88 program places primary emphasis on three modernization goals: enhancing the firepower of our attack helicopters, increasing the lift capacity of our assault-support helicopters, and improving the survivability of both.

Attack Helicopters -- The AH-1 (Cobra), armed with the TOW anti-armor missile, is our primary attack helicopter. To augment its AH-1 force and to enhance the close combat capability of both its light and heavy divisions, the Army is also fielding a new attack helicopter, the AH-64 (Apache). The AH-64 will be able to operate in high mountainous terrain, in adverse weather, and at night using its substantially increased firepower -- a 30mm gun and the new Hellfire anti-armor missile system, which is capable of defeating all known or postulated enemy armor.

Assault-Support Helicopter -- To improve the capability of its assault-support helicopter force, the Army is fielding the UH-60 Blackhawk in selected units as a replacement for its aging UH-1s (Huey). Compared to the UH-1, the UH-60 is more maneuverable and survivable, has greater lift capacity, and is able to travel at higher speeds, significantly enhancing the tactical mobility and flexibility of the units to which it is assigned.

In addition to procuring new UH-60s, the Army will continue several programs in FY 1984-88 to modify other assault support helicopters in its inventory. Modification programs represent a relatively low-cost means of taking advantage of advances in design technology without incurring the costs of developing and fielding a new system. The CH-47D (Chinook) modification program will increase the lift capacity of that helicopter, improve its reliability and maintainability, and reduce its vulnerability, enabling it to meet the Army's medium-lift requirement through the year 2000. The Army Helicopter Improvement Program (AHIP) is intended to modify the Army's current OH-58 scout helicopter to make it capable of worldwide employment during day and night and under conditions of limited visibility. This will be accomplished by improving its flight performance, enhancing its communications and navigation capabilities, and providing it with a mast-mounted sight and laser designator.

The Marine Corps will also continue to improve its force of assault and assault-support helicopters over the next five years. To increase the heavy-lift capacity of its force, it will continue to procure the three-engined CH-53E (Super Stallion). To retain the operational effectiveness of its aging CH-46 medium-lift assault helicopters through their remaining years of service, it is providing continued funding for the CH-46 Safety, Reliability, and Maintainability Update and Fiberglass Rotor Blade programs. In addition to their other missions, the CH-53 and CH-46 will provide into the 1990s the primary lift capability required to land and support the assault echelons of Marine Amphibious Forces.

(b) Developmental Aircraft

Joint Services Advanced Vertical Lift Aircraft (JVX) -- The JVX program is designed to combine a number of the Services' rotary- and fixed-wing development programs into a single effort. Available and demonstrated advanced rotary-wing technology will be utilized to develop a common, basic Vertical and Short Takeoff and Landing (V/STOL) aircraft which can be produced in several variations to meet specific medium-lift needs of all four Services (amphibious assault troop lift, battlefield surveillance and special electronic support, combat rescue, special operations, and medium logistics support). If development proceeds according to schedule, the Marine Corps will take delivery of the first production aircraft in 1991.

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| AH-64 | | | | |
| Development: | | | | |
| $ Millions | 91.9 | 33.6 | 28.3 | 17.1 |
| Procurement: | | | | |
| Quantity | 11 | 48 | 112 | 144 |
| $ Millions | 537.5 | 895.2 | 1,465.5 | 1,414.8 |
| Hellfire 1/ | | | | |
| Development: | | | | |
| $ Millions | 23.1 | 26.1 | 3.3 | 2.9 |
| Procurement: | | | | |
| Quantity | 680 | 3,971 | 5,920 | 6,340 |
| $ Millions | 119.7 | 247.4 | 258.1 | 259.5 |
| UH-60 | | | | |
| Development: | | | | |
| $ Millions | 6.7 | 5.6 | -- | -- |
| Procurement: | | | | |
| Quantity | 96 | 96 | 84 | 78 |
| $ Millions | 638.2 | 584.8 | 480.5 | 533.9 |
| CH-47D | | | | |
| Procurement: | | | | |
| Quantity | 19 | 24 | 36 | 48 |
| $ Millions | 224.4 | 262.7 | 344.0 | 422.2 |
| AHIP | | | | |
| Development: | | | | |
| $ Millions | 38.5 | 73.8 | 53.7 | 24.3 |
| Procurement: | | | | |
| Quantity | -- | -- | 16 | 44 |
| $ Millions | -- | 28.4 | 191.2 | 245.0 |
| JVX 2/ | | | | |
| Development: | | | | |
| $ Millions | -- | 34.8 | 104.3 | 311.6 |

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1/ Reflects Army and Marine Corps budgets
2/ Reflects all Service budgets

## (3) Air Defense

The primary objective of our air defense modernization program is to develop and field a balanced and integrated family of ground and airborne weapons. To be effective, these weapons must be supported and linked by a system of radar, command and control, and electronic warfare equipment. Our ground-based air defense systems are designed to provide a balanced mix of weapons capable of point and area defense against a range of potential threats.

Stinger -- The Stinger is a man-portable, shoulder-fired, infrared-guided missile system designed to defend against low-altitude attacks at relatively short ranges. The system is being procured jointly by the Army and Marine Corps to replace the Redeye and by the Air Force to improve a point air defense capability at selected air bases. A product-improved version of the missile, Stinger-Post, is scheduled to enter production in FY 1983.

Division Air Defense (DIVAD) Gun -- The self-propelled, twin-40mm DIVAD gun is the planned replacement for the self-propelled Vulcan 20mm gun now deployed in the Army's heavy divisions. The initial production contract for DIVAD was signed in May 1982, and the first units are scheduled to be delivered in September 1983. The planned production schedule will permit the Army to achieve its acquisition objective of 618 guns by the end of the FY 1989 FDP.

Patriot -- The Patriot is the Army's advanced all-altitude air defense missile system. Its multifunction, phased-array radar gives it a significant electronic counter-countermeasures (ECCM) capability. The Patriot will be highly effective against all air-breathing targets likely to be encountered through the end of the decade and beyond.

Chaparral -- The short-range air defense missile organic to most active Army divisions, Chaparral will remain in service through the end of the century. To ensure its continued effectiveness, and to improve its capabilities against the Soviet aircraft threat of the 1990s, we are replacing the propellant in rocket motors reaching the end of their shelf-life, modifying the system with forwardlooking infrared radar (FLIR) sensors for engaging targets at night and in poor weather, and developing a guidance system with high resistance to infrared countermeasures.

Improved Hawk (I-Hawk) -- We are proceeding with a program to upgrade the I-Hawk missile for our Army and Marine Corps forces. Included in the program are installation of a new missile motor and provision of a multi-engagement capability, as well as other system reliability, availability, and maintainability upgrades. These improvements will ensure that our I-Hawk systems will continue to operate effectively into the 1990s in the expected electronic countermeasures environment.

Short-Range Air Defense Command and Control (SHORAD $C^2$) -- During the 1980s, the Army's forward-area air defense capability will be enhanced through the introduction of the DIVAD gun, Stinger/Stinger-Post, and an improved Chaparral. To take maximum advantage of these improvements, a division-level SHORAD $C^2$ system is also being developed. In addition to enhancing the management of division air defense resources, automated SHORAD $C^2$

will improve coordination between division and non-division air defense forces.

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| **Stinger** | | | | |
| Development: | | | | |
| $ Millions | 16.1 | -- | -- | -- |
| Procurement: | | | | |
| Quantity | 3,032 | 3,816 | 2,322 | 3,757 |
| $ Millions | 219.3 | 311.6 | 183.7 | 428.0 |
| **DIVAD Gun** | | | | |
| Development: | | | | |
| $ Millions | 29.9 | 10.9 | -- | -- |
| Procurement: | | | | |
| Quantity | 50 | 96 | 130 | 132 |
| $ Millions | 375.2 | 618.3 | 671.1 | 630.7 |
| **Patriot** | | | | |
| Development: | | | | |
| $ Millions | 55.8 | 46.9 | 84.6 | 69.6 |
| Procurement: | | | | |
| Quantity 1/ | 9/176 | 12/277 | 15/525 | 17/815 |
| $ Millions | 747.3 | 845.0 | 1,127.2 | 1,316.6 |
| **Chaparral Modifications** | | | | |
| Development: | | | | |
| $ Millions | 23.6 | 24.7 | 23.6 | 31.6 |
| Procurement: | | | | |
| Quantity 2/ | -- | -- | -- | -- |
| $ Millions | 88.4 | 37.2 | 17.9 | 205.3 |
| **Improved Hawk** | | | | |
| Development: | | | | |
| $ Millions | 39.4 | 36.4 | 33.5 | 28.3 |
| Procurement: | | | | |
| Quantity 2/ | -- | -- | -- | -- |
| $ Millions | 97.2 | 20.7 | 31.2 | 165.6 |

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1/ Firing units/missiles
2/ Modifications only

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| SHORAD $C^2$ | | | | |
| Development: | | | | |
| $ Millions | 9.2 | 1.0 | 41.6 | 52.4 |
| Procurement: | | | | |
| Quantity | -- | -- | -- | -- |
| $ Millions | -- | -- | -- | -- |

(4) Artillery Fire Support

Our land forces have substantially fewer artillery pieces than do their potential Warsaw Pact opponents. To correct this imbalance, we are improving the target acquisition and fire control capabilities of our weapon systems, providing improved laser designation capabilities for our existing munitions, modernizing our weapon systems, and building up our stockpile of war reserve munitions.

Target Acquisition -- We have merged the Army's Battlefield Data System (BDS) program and the Air Force's PAVE MOVER program into a single development effort -- the Joint Surveillance and Target Attack Radar System (JSTARS) program. (See the $C^3I$ chapter for further details.) The Remotely Piloted Vehicle (RPV), also in development, will improve our ability to locate targets, adjust artillery fire, and designate targets for laser-guided weapons.

Fire Control -- The Army is continuing development of the Advanced Field Artillery Tactical Data System (AFATDS), which will exploit advanced communications and computer technology to develop a new-generation automated fire control system for its firing batteries. The Marine Corps will continue development of the Artillery Computer System (ACS), a lightweight, battery-operated computer intended for use at the firing battery level. Entering procurement in the next five years will be the Army's Battery Computer System (BCS), a small computer that provides firing data for individual guns in a firing battery (thereby permitting more flexible gun positioning and independent automated fire control), and the Meteorological Data System (MDS), which will provide timely and accurate meteorological information to artillery units.

Laser Designators -- Laser designators are used to illuminate and designate targets for laser-guided bombs and projectiles such as Copperhead and Hellfire. The Ground Laser Locator Designator (GLLD) and the Modular Universal Laser Equipment (MULE) are currently in procurement.

Weapons -- The Multiple-Launch Rocket System (MLRS) is a high-rate-of-fire general support artillery rocket system designed to supplement cannon artillery fire, to counter enemy artillery, to suppress enemy air defenses, and to provide mid-range interdiction beyond cannon range. Deployment of the system will begin in FY 1983, and the system has been approved for multiyear procurement. The Army is continuing a multinational program to develop a terminally-guided submunition (TGSM) for the MLRS.

The Army will resume procurement of the M109A2 155mm self-propelled howitzer in FY 1984 and of the M198 155mm towed howitzer in FY 1985, primarily for its Reserve Component units.

In FY 1982, we merged the Corps Support Weapon System (CSWS) program and the Air Force's Conventional Standoff Weapon (CSW) program into a joint project, under the Army's lead. The restructured program (Joint Tactical Missile Program) will use elements of assault breaker technology to develop a surface-to-surface weapon system for conventional and nuclear deep battlefield interdiction.

Ammunition -- In FY 1984, we will continue to build our inventories of improved conventional munitions (ICMs), rocket-assisted projectiles (RAPs), and scatterable mines. We are requesting $878 million in FY 1984 to procure these items for 155mm and 8-inch artillery.

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| JSTARS (formerly BDS) | | | | |
| Development: | | | | |
| $ Millions | 4.1 | 36.8 | 69.0 | 70.5 |
| RPV | | | | |
| Development: | | | | |
| $ Millions | 76.6 | 77.7 | 138.1 | 103.0 |
| Procurement: | | | | |
| Quantity | -- | -- | -- | -- |
| $ Millions | -- | -- | -- | 141.6 |
| AFATDS | | | | |
| Development: | | | | |
| $ Millions | 4.8 | 11.0 | 31.9 | 32.0 |
| BCS | | | | |
| Procurement: | | | | |
| Quantity | 217 | 146 | 146 | 128 |
| $ Millions | 45.4 | 27.9 | 29.4 | 28.2 |
| MDS | | | | |
| Development: | | | | |
| $ Millions | 6.1 | 2.2 | 5.3 | 3.5 |
| Procurement: | | | | |
| Quantity | -- | 6 | 12 | 24 |
| $ Millions | -- | 13.6 | 18.0 | 32.9 |

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| **ACS** | | | | |
| Procurement: | | | | |
| Quantity | -- | -- | -- | -- |
| $ Millions | -- | -- | -- | 16.0 |
| **GLLD** | | | | |
| Procurement: | | | | |
| Quantity | 225 | -- | 105 | 175 |
| $ Millions | 58.7 | -- | 46.8 | 51.9 |
| **MULE** | | | | |
| Procurement: | | | | |
| Quantity | 16 | 120 | 120 | 120 |
| $ Millions | 21.2 | 37.3 | 43.7 | 40.9 |
| **MLRS** | | | | |
| Development: | | | | |
| $ Millions | 40.2 | 23.1 | 1.0 | 3.9 |
| Procurement: | | | | |
| Quantity 1/ | 2,496/68 | 23,640/72 | 36,000/76 | 50,472/44 |
| $ Millions | 203.3 | 444.4 | 551.6 | 619.9 |
| **MLRS TGSM** | | | | |
| Development: | | | | |
| $ Millions | 1.0 | 6.4 | 20.4 | 27.1 |
| **M109A2** | | | | |
| Procurement: | | | | |
| Quantity | -- | -- | 112 | 70 |
| $ Millions | -- | -- | 82.7 | 56.0 |
| **M198** | | | | |
| Procurement: | | | | |
| Quantity | 363 | -- | -- | 63 |
| $ Millions | 129.9 | -- | -- | 31.8 |
| **JTACMS (Formerly CSWS)** | | | | |
| Development | | | | |
| $ Millions | 11.9 | 6.1 | 50.2 | 126.5 |

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1/ Rockets/Launchers.

## Artillery Ammunition

| | FY 1984 | | | |
|---|---|---|---|---|
| | Army | | Marine Corps | |
| | Quantity | $ Millions | Quantity | $ Millions |
| 155mm ICM | 440,000 | 233.0 | 143,343 | 74.6 |
| 155mm RAP | 73,000 | 45.0 | 25,457 | 14.9 |
| 155m Scatterable Mines | 14,000 1/ | 66.4 1/ | 8,237 1/ | 41.2 1/ |
| | 51,000 2/ | 123.3 2/ | 3,199 2/ | 8.5 2/ |
| 8-inch ICM | 186,000 | 201.0 | 11,585 | 12.1 |
| 8-inch RAP | 23,000 | 39.4 | 10,904 | 18.5 |

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1/ ADAM
2/ RAAMS

### (5) Tactical and Support Vehicles

The Army and Marine Corps will continue to upgrade their tactical wheeled vehicle fleets, thereby relieving some of the severe problems caused by shortages and over-age, over-mileage vehicles. Both Services are continuing programs to procure commercial vehicles for use in a variety of tasks. These vehicles are an important adjunct to the tactical fleet, since their use reduces mileage and wear on the more expensive and scarce tactical vehicles.

High Mobility Multipurpose Wheeled Vehicle (HMMWV) -- The Army and Marine Corps will begin replacement of a number of tactical vehicles in the 1/4- to 1-1/4-ton range with the 5/4-ton HMMWV. This highly mobile, diesel-powered, 4 x 4 vehicle is air transportable and droppable, and will have a common chassis with multiple variants, such as weapons carrier, utility, and ambulance. Developmental and operational testing were completed early in FY 1983, and the first deliveries are scheduled for FY 1984.

Commercial Utility and Cargo Vehicle (CUCV) -- The CUCV family of Army and Marine Corps vehicles will complement the HMMWV by replacing a number of tactical vehicles operating in less-demanding tactical environments. The CUCV is a diesel-powered, 4 x 4, 5-4-ton, commercial off-the-shelf vehicle that will be procured in cargo, ambulance, and utility versions.

5-Ton Truck (all body types) -- The Army and Marine Corps are procuring product-improved 5-ton cargo, tractor, and dump trucks and 5-ton wreckers. The Army is also procuring product-improved versions of 5-ton tractor-wreckers and vans. The Marine Corps is continuing its 5-ton retrofit program to convert its M39-series vehicles into the current M809-series 5-ton trucks.

10-Ton Truck (all body types) -- The Army continues to procure the Heavy Expanded Mobility Tactical Truck (HEMTT), its largest 10-ton truck program. The HEMTT is a high-mobility vehicle assembled from commercially proven components and produced in five body styles for use in a variety of combat and combat support units. In FY 1982, the Marine Corps began procurement of the Logistics Vehicle System (LVS), a HEMTT variant with four interchangeable rear body units. Integration of the Army and Marine Corps programs will allow the Marine Corps to field its LVS force 14-18 months earlier than originally planned.

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| HMMWV 1/ | | | | |
| Development: | | | | |
| $ Millions | 3.0 | 3.3 | -- | -- |
| Procurement: | | | | |
| Quantity | -- | 2,328 | 7,194 | 12,747 |
| $ Millions | | 79.0 | 228.3 | 407.3 |
| CUCV 1/ | | | | |
| Procurement: | | | | |
| Quantity | 3,033 | 13,618 | 16,616 | 24,082 |
| $ Millions | 39.9 | 177.4 | 2[illegible].6 | 354.7 |
| 5-Ton Truck 1/ | | | | |
| Procurement: | | | | |
| Quantity | 4,980 | 6,151 | 5,995 | 5,547 |
| $ Millions | 397.4 | 470.6 | 475.9 | 459.3 |
| 10-Ton Truck 1/ | | | | |
| Procurement: | | | | |
| Quantity | 1,356 | 2,618 | 1,464 | 2,872 |
| $ Millions | 196.6 | 402.3 | 240.7 | 483.2 |

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1/ Reflects Army and Marine Corps budgets.

### (6) Tactical Communications and Electronic Intelligence

Command, control, communications, and intelligence ($C^3I$) programs for our land forces are designed to improve our ability to control our forces; to enhance the interoperability, survivability, and restorability of essential $C^3I$ functions; and to increase our capability to jam and monitor the enemy's electronic emitters. Three programs -- Joint Tactical Communications (TRITAC), Joint Tactical Fusion Program (JTFP), and Joint Interoperability of Tactical Command and Control Systems (JINTACCS) -- are discussed in the $C^3I$ chapter. Other key $C^3I$ programs (some of which are also discussed further in that chapter) include:

Ground Mobile Forces (GMF) Satellite Communications -- The GMF program is designed to provide reliable, jam-resistant communications support to deployed commanders using satellite communications links. The Army, Air Force, and Marine Corps will procure several hundred of the various types of transportable terminals, as well as supporting equipment.

**Single-Channel Ground and Airborne System VHF (SINCGARS-V)** -- The SINCGARS-V program will provide secure, ECCM-capable, very high frequency (VHF) radios to replace current vehicular and manpack VHF radios. The four Services will eventually procure some 226,000 of these radios.

**Position Location Reporting System (PLRS) and PLRS/Joint Tactical Information Distribution System (JTIDS) Hybrid** -- The PLRS, jointly developed by the Army and Marine Corps, will provide combat commanders with automatic, near-real-time, precise locations of their forces regardless of terrain, weather, or geographical location. The PLRS/JTIDS hybrid will provide secure, jam-resistant battlefield data distribution among command and control, intelligence, air defense, fire support, electronic warfare, and other systems.

**Electronic Jamming** -- To increase its ability to jam enemy communications, the Army will procure additional TACJAM systems (MLQ-34), more hand-emplaced expendable jammers, and the EH-60 Quickfix electronic warfare helicopter. It will protect its helicopters and special-mission fixed-wing aircraft against radar-, infrared-, and other electronically guided missiles and guns by fielding additional aircraft survivability equipment, including radar/-laser/missile warning receivers, infrared and radar jammers, and dispensers for chaff and flare decoys.

**Tactical Intelligence** -- Principal tactical tactical intelligence modernization programs funded during FY 1984-88 include continued procurement of the Improved Guardrail V, improvements to the Trailblazer (TSQ-114A), development of tactical fusion systems, completion of the Teampack (MSQ-103) program, improvements to Quick-look, and initial development of the JSTARS.

**Communications Security (COMSEC)** -- The Army is procuring several types of modern COMSEC equipment to provide secure tactical communications links among a variety of communications systems.

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| **GMF** | | | | |
| Development: | | | | |
| $ Millions | 14.8 | 17.4 | 17.1 | 25.2 |
| Procurement: | | | | |
| Quantity | -- | -- | -- | -- |
| $ Millions | 68.6 | 87.2 | 109.3 | 153.9 |
| **SINCGARS-V** | | | | |
| Development: | | | | |
| $ Millions | 14.0 | 16.9 | 16.1 | 5.7 |
| Procurement: | | | | |
| Quantity | -- | 650 | 3,200 | 8,250 |
| $ Millions | -- | 19.8 | 50.8 | 138.1 |

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| **PLRS and PLRS/ JTIDS Hybrid** | | | | |
| Development: | | | | |
| $ Millions | 29.4 | 47.0 | 41.0 | 45.1 |
| Procurement: | | | | |
| Quantity | -- | -- | -- | -- |
| $ Millions | -- | 28.2 | 35.3 | 74.5 |
| **Electronic Jamming** | | | | |
| Development: | | | | |
| $ Millions | 23.9 | 29.8 | 78.4 | 102.8 |
| Procurement: | | | | |
| $ Millions | 45.2 | 27.3 | 224.9 | 267.0 |
| **Tactical Intelligence** | | | | |
| Development: | | | | |
| $ Millions | 53.3 | 89.3 | 106.3 | 108.5 |
| Procurement: | | | | |
| $ Millions | 18.6 | 48.3 | 105.1 | 165.8 |
| **Communications Security** | | | | |
| Procurement: | | | | |
| $ Millions | 88.7 | 184.1 | 199.5 | 180.8 |

### 3. Conclusion

Our FY 1984-88 program is aimed at the continuing revitalization of our land forces, severely weakened by the defense spending cutbacks of the 1970s. It is structured to achieve two key goals:

- -- A modern and balanced force with significantly improve manpower and materiel readiness, and
- -- A force capable of rapid buildup and sustained combat operations in varying locations throughout the world.

Each of the initiatives funded in our five-year program will contribute to these goals and to our ultimate objective of effectively countering an increasingly diverse range of threats worldwide. The degree of success we will enjoy in their achievement is, in large measure, directly proportional to the degree of program stability permitted by future legislation.

## B. NAVAL FORCES

### 1. Introduction

#### a. Maritime Policy

As a nation with global commitments and interests, the United States must maintain a strong forward defense posture. In order to carry out our forward defense strategy, U.S. naval forces, in conjunction with allied forces and selected U.S. air and land forces, must be capable -- and be seen as being capable -- of preserving our access to areas vital to our national interests in a timely manner and in the face of the most determined opposition.

While we are still studying in detail the lessons of last year's naval conflict in the South Atlantic, some broad conclusions about maritime strategy are already evident. At the most fundamental level, this conflict reinforced our belief that strong maritime forces are essential to a nation that must defend its interests and support its forces in distant parts of the world. The conflict also made it abundantly clear that multipurpose carrier battle groups -- including airborne early warning aircraft and high-performance, long-range fighter interceptors -- are necessary to ensure the survivability of our surface forces against modern anti-ship weapons. At the same time, the conflict dramatically underscored the need to redouble our efforts to develop improved long-range air surveillance and warning systems, to strengthen the contribution of land-based forces to the defense of the sea lanes, and to develop improved ship self-protection systems.

Beyond these lessons, the performance of the British fleet in the South Atlantic served as a stark reminder to our potential adversaries that the United States has highly capable allies who could contribute significant maritime forces to the common defense if required. The British Navy's performance also demonstrated once again the vital importance of a well-trained and highly motivated force.

#### b. Program Goals

Our policy of maintaining sufficient allied maritime strength in key ocean areas requires continued improvements in our naval forces. Our programs are intended to enhance the readiness and sustainability of our existing forces, while striking an appropriate balance between modernization and force expansion requirements. Specifically, we have structured our programs to meet five broad objectives:

- Improved day-to-day fleet readiness and sustainability;
- Increased and more diversified offensive striking power;
- Increased attention to air defense of the sea lanes, including the use of appropriate land-based forces;
- Continued improvements in anti-submarine warfare capabilities in order to meet the threat of an increasingly sophisticated Soviet submarine force; and
- Improved amphibious assault capability.

### c. Expansion of Naval Force Structure

As outlined in last year's report, we now aggregate our most capable and ready naval forces into a "deployable battle force" category, shown in Table III.B.1. Our program to build a "600-ship Navy" is structured in the context of this counting method, which focuses on those ships that are suitable for wartime deployment overseas. The counting method includes almost all of our active ships and some of our Military Sealift Command (MSC) and Naval Reserve Force (NRF) ships, such as the modern frigates that we are transferring from the active force to the NRF.

When this Administration took office, our deployable battle force numbered 479 ships. By the end of FY 1983, the force will have grown to 506 ships. Counting our sealift, auxiliary, and reserve mobilization ships brings the force total to 560 ships. Our FY 1984-88 program projects that the deployable battle force will grow to about 610 ships and the total operating inventory to about 650 ships by the early 1990s, when nearly all the ships in our five-year shipbuilding plan will have joined the fleet.

(UNCLASSIFIED) TABLE III.B.1

Deployable Battle Forces [1]
(End fiscal year)

| | 1981 | 1982 | 1983 |
|---|---|---|---|
| Ballistic Missile Submarines | 34 | 33 | 34 |
| Strategic Support Ships | 7 | 6 | 6 |
| Aircraft Carriers | 12 | 13 | 13 |
| Battleships | 0 | 0 | 1 |
| Cruisers/Destroyers | 110 | 112 | 97 |
| Nuclear Attack Submarines | 82 | 91 | 91 |
| Diesel Attack Submarines | 5 | 5 | 5 |
| Amphibious Ships | 65 | 65 | 60 |
| Frigates | 78 | 86 | 95 |
| Patrol Combatants | 1 | 4 | 6 |
| Mine Warfare Ships | 3 | 3 | 3 |
| Mobile Logistic Ships | 72 | 72 | 73 |
| Combat Support Ships | 22 | 23 | 22 |
| Total | 491 | 513 | 506 |

---

[1] Includes appropriate Naval Reserve Force (NRF) and Navy Fleet Auxiliary Force (NFAF) ships.

Despite the importance I attach to the expansion of our naval fleet, I should also emphasize the limitations of focusing solely on ship numbers to measure the strength of our maritime power. Our general purpose naval forces include large numbers of land-based aircraft, such as the P-3 maritime patrol aircraft that contribute substantially to our anti-submarine warfare capabilities. In the future, Air Force fighters, early warning aircraft, and bombers will also assume an increasingly important role in supporting maritime missions, although the decision to commit additional forces to maritime defense tasks must take into account the potential degradation of other missions. Other key factors that have a major impact on our maritime capabilities include force readiness and sustainability, personnel training and morale, and the quality of our sensor systems and weapons. Moreover, our allies deploy a large number of highly capable ships and maritime aircraft that would make significant contributions to our common defense in a major conflict.

## 2. FY 1984-88 Programs

### a. Force Readiness and Deployments

The defense spending increases in FY 1981 and FY 1982 have registered their most immediate impact on fleet readiness and sustainability. In particular, the increases in compensation in the past two years have contributed significantly to improved retention of experienced personnel and the enlistment of high-quality recruits -- a major factor in the recent improvement in fleet readiness. Continued emphasis on programs to enhance readiness and sustainability will be required, but the improvement to date provides encouragement that we are on the right track. For example, the proportion of our surface ships considered "ready for combat" has increased by six percentage points over the past two years.

#### (1) Forward-Deployed Presence

(U) The Navy has implemented a new plan for forward deployments of carrier battle groups that adjusts our traditional forward presence to provide more flexibility in our deployments -- hence its name, Flexible Operations (Flex Ops). The new schedule maintains our carrier battle group presence at previous levels in the Mediterranean and the Pacific theaters, while reducing presence in the Indian Ocean from an average of one and one-half carrier battle groups to one continuously deployed group. This adjustment provides opportunities for worldwide battle group training involving two or more carriers and for increased operations in areas where carriers have seldom operated in the past, such as the Caribbean, the Sea of Japan, and the Northwest Pacific. The Flex Ops schedule reduces the predictability of our carrier deployments and provides the flexibility to increase presence in areas of potential crisis, should circumstances require. It also eases somewhat the strain on fleet personnel and material readiness that resulted from the Indian Ocean buildup of 1980 and 1981.

#### (2) Material Readiness

Our five-year program provides balanced funding for each level of maintenance. We have programmed funds to achieve real growth in organizational and intermediate maintenance functions -- a critically important area that has been a prime target of spending cuts in recent years. Decreased funding for depot maintenance reflects a reduction in the number of ship overhauls, a result of the Navy's new extended operating cycle program. Growth in funding for ship spare and repair parts is consistent with our force expansion and operating objectives.

(3) Sustainability

We have budgeted more than $4.5 billion in FY 1984 for munitions and war reserve secondary items, to continue the Navy's progress toward meeting the DoD goal of achieving approved levels of sustainability by the end of the FY 1987 funded delivery period. Specifically, we are giving priority attention to building up our inventory of air-to-air and surface-to-air missiles.

b. Carrier Battle Forces

(1) Multimission Capabilities

The linchpin of our naval force projection capability continues to be the multipurpose carrier battle group. The mix of tactical aircraft on these carriers, together with accompanying surface combatants and submarines, provides capabilities across the full spectrum of naval missions. The British fleet's experience in the South Atlantic conflict underscored the wisdom of structuring our carrier battle group forces to provide multimission flexibility. Particularly important is the need for airborne early warning aircraft, long-range interceptors, and long-range anti-submarine warfare aircraft (such as the S-3 Viking) -- a requirement that demands aircraft carriers large enough to support conventional takeoff and landing aircraft.

(2) Force Expansion Plans

With the delivery of the CARL VINSON (CVN-70) in FY 1982, we achieved a force of 13 deployable carriers. The third ship of the highly successful NIMITZ class, the VINSON will begin overseas deployments in March 1983, thus easing the deployment burden on our carriers. Our FY 1984-88 program provides for expansion to 14 deployable carriers and active air wings, coincident with the accelerated delivery of the THEODORE ROOSEVELT (CVN-71) in FY 1987.

(3) Service Life Extension Program

Our service life extension program (SLEP) is vital to our force modernization and expansion plans. By extending the service life of our existing large-deck carriers for an additional 15 years, SLEP promises to be an economical supplement to new ship construction -- particularly since only one shipyard is currently capable of building new CVNs. Work on our first SLEP carrier, the SARATOGA, is proceeding on schedule toward a target completion date in early 1983. When the SARATOGA SLEP is completed, we will begin work on the FORRESTAL at the Philadelphia Naval Shipyard, with other carriers following at a planned rate of one every two years.

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| **Aircraft Carriers (CVN)** | | | | |
| Procurement: | | | | |
| Quantity | -- | 2 | -- | -- |
| $ Millions | 554.5 | 6,554.1 | 98.2 | 13.9 |
| **Service Life Extension Program** | | | | |
| Quantity | -- | 1 | -- | 1 |
| $ Millions | 109.2 | 717.1 | 118.7 | 820.9 |

### c. Other Strike Forces

#### (1) Battleship Reactivations

Reactivation of the four IOWA-class battleships will permit a significant increase in our naval gunfire and surface strike capabilities. The program is proceeding on schedule and within cost estimates, with the NEW JERSEY (the first ship to be reactivated) recommissioned in December 1982. During initial sea trials, we successfully tested the ship's main propulsion, electrical, and other major noncombat systems. Combat system tests conducted last October included firings of the ship's original 16-inch and 5-inch guns and the newly installed Vulcan Phalanx Close-In Weapon System (CIWS). The ship is fully manned, and the crew is living aboard. Fitting out and training will be conducted in January and February 1983, after which the Navy will test the new Tomahawk and Harpoon cruise missile systems. The NEW JERSEY is scheduled to be available for its first deployment in March 1983.

The IOWA, the next ship to be reactivated, has been moved from her berth at Philadelphia, and drydocking and preliminary work planning are under way. This will be our first reactivation in a private yard. Our plans for future reactivations include funding of the third ship, the MISSOURI, in FY 1985, followed by the fourth, the WISCONSIN, in FY 1986.

#### (2) Tomahawk Cruise Missiles

The Tomahawk cruise missile program represents a major effort to improve the firepower of our naval units and to distribute our offensive striking power among a larger number of ships. Tomahawk is a highly capable and versatile weapon system that can be launched from a variety of surface ships, submarines, and aircraft against enemy surface ships and shore targets beyond the horizon. The early phases of this program have clearly proven the system's worth. The missile has, however, experienced some quality assurance problems in production. As a result, we have slowed production from our earlier projections until these problems are completely resolved. Once we are satisfied with the system's reliability, we plan to procure and deploy the missile in large numbers. Our FY 1984-88 program requests funding for a total of 1,861 missiles.

Tomahawk will be deployed on a wide range of ships and submarines. The first operational missiles will be deployed in armored box launchers on our reactivated battleships. We plan to install a vertical launch system (VLS) on our SSN-688 attack submarines marines, starting with SSN-719, and on all but the first five new-construction CG-47-class Aegis cruisers, and will retrofit the system on DD-963 destroyers. New DDG-51 guided missile destroyers will also be equipped with the vertical launch system.

(3) Harpoon Anti-Ship Missiles

We plan to continue production of the highly successful Harpoon anti-ship cruise missile, with a total of 1,524 missiles budgeted in the FY 1984-88 program. The Harpoon system is deployed on most of our surface combatants and on many of our attack submarines. The missile can also be launched from P-3 patrol aircraft and A-6 attack aircraft, and we plan to modify S-3 patrol aircraft to carry it as well. We are also conducting compatibility tests with the Air Force's B-52G heavy bomber.

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| Battleship Reactivations | | | | |
| Quantity | 1 | 1 | -- | 1 |
| $ Million | 332.7 | 315.6 | 72.1 | 587.7 |
| Tomahawk Missiles | | | | |
| Procurement: | | | | |
| Quantity | 88 | 54 | 124 | 353 |
| $ Millions | 232.6 | 223.7 | 393.3 | 768.2 |
| DD-963 VLS Backfit | | | | |
| Quantity | -- | 1 | -- | 4 |
| $ Millions | -- | 40.3 | 11.2 | 103.6 |
| Harpoon Missiles | | | | |
| Procurement: | | | | |
| Quantity | 240 | 231 | 340 | 340 |
| $ Millions | 230.7 | 232.7 | 312.5 | 345.1 |

d. Anti-Air Warfare (AAW) Forces

Soviet anti-ship cruise missiles, especially those launched from long-range bombers and submarines, pose an increasingly serious threat to our naval forces and sea lines of communication. The Soviets continue to build the Backfire bomber, which can threaten our naval forces over a large part of the world's ocean area, and they are developing a new bomber, the Blackjack, with even longer range and greater payload. They are also deploying a new class of submarines, the Oscar SSGN, each of which is capable of carrying 24 anti-ship cruise missiles. In addition to their bomber and submarine modernization programs, the Soviets are also improving their anti-ship missiles by extending their range and increasing their speed and targeting capabilities.

### (1) Defense-In-Depth Concept

To defend against air attacks, our carrier battle groups employ a "defense-in-depth" approach consisting of three concentric zones -- an outer defense zone, a surface-to-air missile (SAM) area defense zone, and a point defense zone. Our five-year plan continues programs to upgrade our capability in each of these zones. For outer defense zone protection, our carrier battle forces rely on carrier-based E-2C airborne early warning aircraft, fighter interceptors (F-14s, F-4s, and -- in the future -- F-18s), and EA-6B electronic warfare aircraft. SAM area defense capability is provided by our anti-air warfare ships, which in the future will include CG-47 cruisers and DDG-51 destroyers. Point defense is provided by short-range SAMs (NATO Sea Sparrow), guns (Vulcan Phalanx Close-In Weapon System), and electronic warfare and decoy systems. Electronic warfare systems, by countering the enemy's surveillance and targeting capability and reducing missile launch range, also have the potential to increase fighter effectiveness.

Our preferred approach is to destroy enemy bombers before they can reach missile launch range by intercepting them in the outer defense zone. To accomplish this, we must have warning of an attack early enough to get a large portion of the fighters in our carrier battle groups into position to engage the bombers. This requires improved long-range surveillance. As part of our Integrated Tactical Surveillance System (ITSS) program, we have begun development of a tactical Over-the-Horizon (OTH) radar to improve our early warning capabilities. OTH radars will provide detection capabilities between 500 and 1,800 nautical miles from their basing sites. ITSS will also improve the ability of our command, control, communications, and intelligence ($C^3I$) systems to integrate data obtained from OTH radars and other sensor systems, with the objective of delivering a complete surveillance product to the battle group in time to allow our fighter forces to intercept an incoming bomber raid before the bombers reach missile launch range. Additional improvements to our naval $C^3I$ systems are described in the $C^3I$ chapter of this report.

### (2) Land-Based Forces for Sea Lane Defense

We have made a major decision to expand the role of our land-based forces in defending the sea lanes against Soviet long-range bombers armed with anti-ship missiles. Where geographically feasible, we plan to establish barriers composed of land-based interceptors, supported by long-range surveillance systems, to detect and engage Soviet bombers before they can threaten our naval forces and other ships transiting the sea lanes. We have identified several deficiencies in our existing capability to use land-based forces for maritime air defense operations, including inadequate wide-area surveillance, vulnerability of communications systems to jamming, and insufficient joint Navy/Air Force training.

Our FY 1984 budget funds programs that will bolster our capabilities in each of these areas. To improve our wide-area surveillance and early warning capabilities, we will accelerate OTH radar development and use Airborne Warning and Control System (AWACS) aircraft to support land-based fighters in maritime air defense operations. To improve our tactical $C^3$ capabilities, we are starting a program to make the communications equipment in our AWACS aircraft more jam resistant. Finally, to improve the ability of our naval and air forces to function as an integrated team in sea of lane defense operations, we are expanding joint Navy/Air Force planning and are arranging for more joint training exercises.

With these improvements, we expect our land-based fighters, with support from AWACs aircraft and British air defense forces, to be highly effective against the Soviet bomber threat in the important North Atlantic region. With OTH radar support, land-based fighters in other regions will also have a capability to help carrier battle groups defend themselves, as well as to protect critical sea lanes, defend vital bases, and assist in crisis management.

### (3) CG-47 Aegis Program

The FY 1984-88 shipbuilding program funds procurement of 14 CG-47 guided missile cruisers with the highly effective Aegis weapon system. Combined with the ships already authorized, this procurement profile will give us 24 Aegis cruisers by the early 1990s. These ships will substantially increase the air defense firepower of our carrier battle groups against coordinated bomber raids and anti-ship cruise missile saturation attacks. During the past year, the lead ship of this new class, the TICONDEROGA, conducted highly successful sea trials, confirming that its high speed and sea-keeping capabilities will meet the requirements for operating with our carrier battle groups. Tests of the Aegis combat system have reinforced our confidence that our CG-47 force will significantly strengthen our anti-air warfare capability.

All of the Aegis cruisers in the five-year shipbuilding program will be equipped with the vertical launch system. This system increases ship magazine size, improves missile system reliability, and provides a significant increase in the launch rate for surface-to-air missiles.

To improve our defenses against the more formidable Soviet anti-ship missile threat of the future, we have established a product improvement development program for the Aegis weapon system. We have also begun development of an improved surface-to-air missile for use with the Aegis system.

### (4) DDG-51 Program

To replace the large number of guided missile cruisers and destroyers scheduled for retirement in the 1990s, we are developing a new surface combatant, the DDG-51, that will be less costly than the CG-47. Designed primarily for anti-air warfare, the DDG-51 will be a general purpose battle-group-capable escort, with substantial surface and anti-submarine warfare capabilities as well. Its modified Aegis system and vertical launchers will also permit it to operate independently, in protection of all types of naval forces. The lead ship is scheduled for authorization in FY 1985, and we plan to buy several ships each year in the late 1980s and early 1990s. Ultimately, we envision deploying a force of about 60 DDG-51 ships.

### (5) Other Cruiser and Destroyer Programs

To strengthen our fleet air defense capability against the growing anti-ship cruise missile threat, we are continuing to upgrade our existing cruisers and destroyers. Programs funded during FY 1984-88 include conversion of Terrier cruisers and destroyers to carry the advanced Standard missile (SM-2) and the follow-on New Threat Upgrade Program for Terrier and Tartar cruisers and DDG-993-class destroyers.

### (6) Point Defense Systems

Modernization of surface ship self-defense systems will continue in FY 1984 with procurement and installation of the Phalanx Close-In Weapon System, the NATO Sea Sparrow missile (NSSM) system, and the AN/SLQ-32 electronic warfare system. The improved Sea Sparrow missile (RIM-7M) is also programmed for retrofit in NSSMs installations. In addition, the five-inch Rolling Airframe Missile (RAM) is nearing the end of development and will soon be available for retrofit in selected NSSM installations.

AN/SLQ-32 electronic warfare equipment is now being installed on combatant ships. We are requesting funds to continue development of modifications that will increase the system's electronic warfare capabilities and to develop countermeasures against enemy anti-ship missiles. We are also developing a family of decoys designed to counter radar, infrared, and anti-radiation missile seekers.

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| **OTH Radars** | | | | |
| Development: | | | | |
| $ Millions | -- | 1.5 | 39.0 | 39.0 |
| Procurement: | | | | |
| Quantity | -- | -- | -- | 2 |
| $ Millions | -- | -- | -- | 120.0 |
| **Aegis Cruisers** | | | | |
| Procurement: | | | | |
| Quantity | 3 | 3 | 3 | 3 |
| $ Millions | 2,927.7 | 2,926.8 | 3,707.3 | 3,568.0 |
| **DDG-51 Destroyers** | | | | |
| Development: | | | | |
| $ Millions | 52.9 | 138.3 | 111.0 | 129.8 |
| Procurement: | | | | |
| Quantity | -- | -- | -- | 1 |
| $ Millions | -- | -- | 99.5 | 1,363.7 |

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| Standard Missiles | | | | |
| Procurement: | | | | |
| Quantity | 1,095 | 1,175 | 1,231 | 1,800 |
| $ Millions | 452.2 | 626.2 | 624.9 | 1,005.8 |
| Phalanx Close-In Weapon System | | | | |
| Procurement: | | | | |
| Quantity | 49 | 37 | 40 | 49 |
| $ Millions | 161.4 | 124.1 | 130.2 | 169.1 |
| Sea Sparrow Missiles | | | | |
| Procurement: | | | | |
| Quantity | 294 | 360 | 370 | 361 |
| $ Millions | 64.8 | 75.1 | 87.3 | 61.4 |
| Rolling Airframe Missile System | | | | |
| Development: | | | | |
| $ Millions | 17.9 | 16.2 | 4.6 | 4.0 |
| Procurement: | | | | |
| Quantity | -- | -- | -- | 60 |
| $ Millions | -- | -- | 13.4 | 24.1 |

### e. Anti-Submarine Warfare (ASW) Forces

We are strengthening all aspects of our ASW capabilities -- detection, identification, localization, and attack -- in response to the growing Soviet submarine threat. In most instances, new Soviet submarine types -- such as the Oscar SSGN, the Alfa SSN, the Typhoon SSBN, and other classes that may appear in the future -- are faster and quieter, and can dive deeper. The Soviets are also developing more capable submarine-launched anti-ship missiles. Accordingly, we must intensify our efforts now to improve our ASW capabilities.

#### (1) ASW Defense-in-Depth Strategy

Effective defense against the Soviet submarine threat requires a defense-in-depth ASW strategy. Long-range, land-based P-3 patrol aircraft and attack submarines, supported by underseas surveillance systems, form an outer zone of ASW defense capable of offensive operations against enemy submarines in forward areas and barriers. Our attack submarines operating in concert with carrier battle groups; our carrier-based S-3 aircraft; and our surface combatants, equipped with towed-array passive sonar systems and LAMPS helicopters, provide a middle zone of ASW protection. An inner defensive zone is provided by surface combatants equipped with hull-mounted active sonars and by carrier-based helicopters. This layered defense maximizes enemy submarine attrition and provides a high level of protection for our naval forces. To the greatest extent possible, we prefer to engage enemy submarines far forward of our naval forces and sea lanes, before they come within weapons range. This puts a premium on effective area surveillance systems and long-range patrol aircraft.

### (2) ASW Surveillance Systems

### (a) Fixed Undersea Surveillance Systems

Fixed undersea surveillance systems are a key factor in our ASW capability. We are continuing to upgrade our existing systems.

### (b) TAGOS Surveillance Towed-Array Sonar System (SURTASS)

Our new mobile surveillance system, TAGOS SURTASS ships, will begin operations in late 1984. These ships will complement our fixed surveillance systems by providing the necessary flexibility to respond to changes in Soviet submarine deployment patterns and by extending coverage to remote ocean areas not presently monitored by fixed systems. They would also serve as an emergency backup system should our fixed systems be incapacitated. The Congress has appropriated funds for the first 12 of these ships. Our FY 1984-88 program requests funding for an additional six.

### (c) Rapidly Deployable Surveillance System (RDSS)

To augment our existing surveillance systems, we are developing a new, mobile monitoring system, designated RDSS, that will be dropped from aircraft to provide undersea surveillance coverage as needed on a time-urgent basis. We will be able to move it quickly to areas of special surveillance interest, where it could augment or replace existing systems for extended periods of time. Our development program is structured to support initial deployment of the system in the late 1980s with more sophisticated models coming on line in later years.

### (3) Attack Submarine Programs

Nuclear-powered attack submarines are a key component of our anti-submarine warfare forces, in addition to providing powerful anti-ship capabilities and serving as launch platforms for new sea-launched cruise missiles. Continued construction of our highly capable multimission SSN-688 LOS ANGELES-class submarines is therefore vital to our ability to meet our maritime objectives.

We are happy to report that production problems with our SSN-688-class submarines now appear to be behind us. During calendar year 1982, four SSN-688s were delivered, following seven deliveries in 1981. We continue to be pleased with the high quality of these submarines.

The Congress has authorized construction of 41 SSN-688s through FY 1983. We are requesting authorization of 21 additional submarines in our five-year program, including three units in FY 1984. The higher rate of construction planned for the latter years of our program is needed to replace the large numbers of existing submarines scheduled for retirement in the 1990s.

To ensure their continued high effectiveness in the future, we are also moving forward with a program to modify and improve our SSN-688 force. The design for our new-construction submarines has been modified to include vertical launch tubes, which will increase missile capacity without reducing the number of other weapons carried. We are investigating the possibility of retrofitting our existing 688-class submarines with these launch tubes during overhaul.

We are also improving the sensor and weapons capabilities of our submarine fleet. The Submarine Advanced Combat System (SUBACS), now under development, will incorporate new sensor and computer processing capabilities to maintain our technological edge in this vital area.

For the longer term, we are planning to design a new submarine to capture the latest advances in technology. This effort is now in a preliminary phase, with initial construction envisioned for the late 1980s.

### (4) Maritime Patrol Aircraft

The Navy's land-based maritime patrol aircraft force is organized into 37 squadrons (24 active and 13 reserve), each containing nine P-3 aircraft. Studies and fleet exercises confirm that these aircraft will continue to make a substantial contribution to the Navy's ASW capabilities in the years ahead. The reserve squadrons operate our oldest models, the P-3As and early P-3Bs, which have become technologically obsolete relative to the current Soviet submarine threat. In view of this problem, and the block retirements of these aircraft scheduled in the early 1990s, our program funds continued production of P-3C aircraft, in order to maintain an adequate ASW capability into the next decade.

Recent Navy assessments have reconfirmed that the cost of converting our older force of P-3A and lightweight P-3B aircraft to a modern configuration and extending their useful service life would approach 80-85% of the cost of producing new P-3C aircraft. Accordingly, we are proposing a balanced P-3C production and modernization program that will keep pace with the threat without the need for an expensive development program for a new follow-on aircraft. Our FY 1984-88 program includes 29 P-3C aircraft, which, in conjunction with possible future foreign sales and procurement of EP-3 electronic surveillance aircraft, will ensure a reasonably efficient production rate. The six aircraft authorized in FY 1983 will be the first P-3C aircraft produced in the upgraded Update III configuration with the Advanced Signal Processor, the AN/UYS-1.

### (5) Light Airborne Multipurpose System

(U) After another series of successful at-sea tests, we have conducted a program review of the LAMPS MK III (SH-60B) ASW helicopter system to assess its readiness to enter full-scale production. The review revealed several areas that will require further development and testing, but, on balance, we believe the system is ready for full production. The first helicopters are now scheduled to begin fleet operations in the fall of 1983. Once introduced into the fleet, LAMPS MK III aircraft will significantly improve the ASW capabilities of our surface combatants. We also expect high system reliability as a result of careful design and sustained testing.

When we submitted the FY 1983 budget, we envisioned a four-year SH-60B production run, to minimize unit costs through high production rates. This plan would have delivered some helicopters ahead of ship availability. In considering the FY 1983 budget, the Congress reduced the FY 1983 production rate to 27 aircraft. In view of this reduction and the overall budget constraints we face, we have decided to fund 21 aircraft in FY 1984. This rate will be sufficient to provide one helicopter for each LAMPS MK III-configured ship. Although this more modest production rate will raise unit costs, it will provide a better match between helicopter deliveries and ship availability, while minimizing the costs associated with any subsystem changes that may result from ongoing development activities and operational tests.

### (6) SH-60F CV Helicopters

Our FY 1984 budget request includes funds to start the development of a replacement for the SH-3H helicopter. These helicopters provide an active dipping sonar capability, along with search and rescue and logistics support, for our carriers. The replacement helicopter, the SH-60F, will be a derivative of the SH-60B LAMPS MK III. We anticipate a program review in early 1983 to refine the cost, schedule, and performance requirements for this program.

### (7) Surface Combatant Tactical Towed-Array Sonar (TACTAS)

The long-range detection capabilities of TACTAS will substantially enhance the ASW capability of our surface combatants, providing an essential counter to the continuing increases in the range of weapons carried by Soviet submarines. The SQR-18 towed-array sonar is scheduled for installation on all 46 of our FF-1052 class frigates, with about two dozen systems deployed to date. The SQR-19, an advanced-design TACTAS scheduled for installation on DD-963s, CG-47s, active force FFG-7s, and our new DDG-51 destroyers, will provide even greater range capability than the SQR-18. The Navy has completed at-sea evaluations of the SQR-19, with excellent results, and expects to begin deploying the system in the late 1980s.

### (8) ASW Weapons

#### (a) MK-48 Torpedoes

The FY 1984-88 program continues production of MK-48 torpedoes for our submarines. These highly capable weapons can be used against both submarines and surface ships. Development of the Advanced Capability (ADCAP) modification is proceeding on schedule. ADCAP will provide improvements needed to counter faster Soviet submarines with deeper diving capabilities and reduced acoustic target strength and to perform effectively in shallow water, in high sea states, under ice, and in the presence of advanced countermeasures. Initial deployment of the torpedo is scheduled for the mid-1980s.

#### (b) Lightweight Torpedoes

The MK-46 is our conventional lightweight ASW torpedo designed for launch from surface ships and aircraft. To provide needed near-term improvements against increasingly capable Soviet submarines, we are procuring a new version, called NEARTIP (for the Near-Term Improvement Program). The program includes both new torpedoes and conversion kits to upgrade older MK-46s. For the longer term, we are developing the Advanced Lightweight Torpedo (ALWT) to counter more capable future Soviet submarines. ALWT will provide a significant improvement in performance over the MK-46 torpedo. If the current rate of progress is maintained, the program should enter full-scale development in FY 1984.

### (c) Long-Range ASW Weapons

We are developing two new long-range ASW weapons that will allow our submarines and surface ships to attack enemy submarines outside effective torpedo range. To replace existing Anti-Submarine Rockets (ASROC) deployed on our surface ships, we have begun the Vertical Launch ASROC (VLA) program. The ASW Standoff Weapon (ASW SOW) is slated to replace the Submarine Rocket (SUBROC) deployed with our attack submarine force.

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| **TAGOS SURTASS Ships** | | | | |
| Procurement: | | | | |
| Quantity | 4 | -- | -- | 2 |
| $ Millions | 161.9 | 2.9 | 6.1 | 142.1 |
| **RDSS** | | | | |
| Development: | | | | |
| $ Millions | 6.7 | 19.3 | 21.1 | 20.0 |
| **SSN-688 Submarines** | | | | |
| Procurement: | | | | |
| Quantity | 2 | 2 | 3 | 4 |
| $ Millions | 1,612.7 | 1,688.3 | 2,174.1 | 3,057.2 |
| **P-3 Patrol Aircraft** | | | | |
| Procurement: | | | | |
| Quantity | 12 | 6 | 5 | 6 |
| $ Millions | 430.8 | 299.1 | 289.6 | 415.1 |
| **SH-60B LAMPS MKIII** | | | | |
| Procurement: | | | | |
| Quantity | 18 | 27 | 21 | 18 |
| $ Millions | 706.7 | 788.3 | 596.0 | 574.5 |
| **TACTAS** | | | | |
| Development: | | | | |
| $ Millions | 17.8 | 9.8 | 3.7 | -- |
| Procurement: | | | | |
| Quantity | -- | 5 | 16 | 15 |
| $ Millions | 9.0 | 70.6 | 136.5 | 126.6 |

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| MK-48 Torpedoes | | | | |
| ADCAP Development: | | | | |
| $ Millions | 91.9 | 180.4 | 182.1 | 139.4 |
| ADCAP MOD Kit Procurement: | | | | |
| Quantity | - | - | - | 66 |
| $ Millions | - | - | 78.5 | 196.2 |
| MK-48 MOD 4 Procurement: | | | | |
| Quantity | 144 | 120 | 144 | 144 |
| $ Millions | 124.1 | 119.9 | 127.1 | 137.3 |
| MK-46 ASW Torpedoes | | | | |
| Acquisition and Conversion: | | | | |
| Quantity | 228 | 440 | 1,200 | 1,565 |
| $ Millions | 151.7 | 139.4 | 250.3 | 298.7 |
| ALWT | | | | |
| Development: | | | | |
| $ Millions | 104.2 | 115.1 | 146.1 | 133.7 |
| ASW Standoff Weapon | | | | |
| Development: | | | | |
| $ Millions | 35.4 | 20.2 | 28.0 | 63.4 |

### f. Amphibious Assault Forces

Our FY 1984-88 shipbuilding program funds 13 amphibious ships. These new ships will increase our amphibious assault shipping capacity, permitting major amphibious operations in two separate theaters in wartime and easing the burden of overseas deployments on amphibious fleet personnel in peacetime. This will improve our ability to respond flexibly to threats to our interests around the world. Increased amphibious lift capacity is also needed to support the heavier, more capable equipment being introduced into the Marine Corps inventory and to replace aging ships. To ease the block retirement problem we face in the 1990s, we have also programmed a service life extension program for selected amphibious ships.

#### (1) Amphibious Ships

##### (a) LHD-1

The FY 1984 budget requests authorization of the lead ship in our Multipurpose Amphibious Assault Ship (LHD-1) program. The three LHD-1-class ships requested in our five-year program will significantly increase our amphibious lift capacity, particularly our helicopter assault capability. Like the existing LHA Amphibious Assault Ship on which its design is based, the LHD-1 will displace about 40,000 tons, but it will be able to carry more air-cushioned landing craft than the LHA. The LHD-1 will also be better able to support vertical/short takeoff and landing (V/STOL) aircraft, giving it a secondary mission of operating as a light carrier in the sea control role.

(b) LSD-41

Our FY 1984 budget also requests funding for the fourth LSD-41 dock landing ship. The nine ships in our five-year program, together with the three already authorized, will greatly increase the fleet's capability to carry our new, high-speed Landing Craft Air Cushion (LCAC), with a corresponding enhancement in our ship-to-shore surface assault capability. Construction of the lead LSD-41 ship, the WHIDBEY ISLAND, is proceeding on schedule, with delivery expected in FY 1985.

(c) LPDX

Our FY 1984-88 shipbuilding program funds development of a third new amphibious ship, the Landing Platform Dock (LPDX). A notional ship, the LPDX will be similar in size to the LSD-41 but will carry fewer LCACs, trading landing craft space for greater capacity to carry troops, vehicles, helicopters, and cargo. Authorization of the lead ship is scheduled for FY 1988.

(d) Amphibious SLEP

We are also programming a service life extension for existing LPH helicopter carriers and LPD-4 ships. Without life extensions, these ships would have to be retired in the latter half of the 1990s, creating a major block retirement program. Keeping the ships in the force longer supports our goal of increasing our amphibious assault capability, and it will allow an orderly replacement program for our amphibious fleet.

(2) Landing Craft

The LCAC program will replace most of our existing conventional landing craft with air-cushioned craft capable of transporting troops and equipment to the shore at speeds in excess of 40 knots. LCAC will provide a major increase in assault flexibility, enabling our amphibious forces to land rapidly in areas where enemy forces are weakest. The six craft authorized through FY 1983 will be available for fleet operations in FY 1986. The FY 1984 budget requests authorization of six more, leading to full-rate production of 12 craft in FY 1985. Over the next five years, we plan to procure a total of 54 LCACs.

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| LHD-1 | | | | |
| Procurement: | | | | |
| Quantity | -- | -- | 1 | -- |
| $ Millions | 45.0 | 55.0 | 1,379.7 | 113.5 |

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| LSD-41 | | | | |
| Procurement: | | | | |
| Quantity | 1 | 1 | 1 | 2 |
| $ Millions | 304.0 | 417.5 | 525.1 | 696.3 |
| Amphibious Service Life Extension | | | | |
| $ Millions | -- | -- | 13.8 | 46.2 |
| LCAC | | | | |
| Procurement: | | | | |
| Quantity | 3 | 6 | 6 | 12 |
| $ Millions | 98.4 | 62.1 | 169.3 | 285.2 |

### g. Escort and Support Forces

Many of our existing surface combatants, mine warfare vessels, and support ships will reach the end of their service lives in the 1980s and early 1990s. To prevent a serious reduction in force levels when these ships retire, our five-year shipbuilding program funds a number of important programs that will preserve, and strengthen, our ability to support our carrier battle groups and other naval forces. We have given high priority to the construction of new, more capable anti-air warfare ships such as the CG-47 cruiser and DDG-51 destroyer. We have also placed renewed emphasis on mine warfare ship procurement. In addition, our program recognizes the need to modernize and expand our aging force of underway replenishment ships and other support ships.

#### (1) Frigates

No additional FFG-7-class frigates are requested in this year's budget. The procurement from previous years, together with our other modern frigates and the substantial forces contributed by our allies, will provide us with an adequate level through the end of the decade. Early ships of the FFG-7 class in a LAMPS MK I/TACTAS configuration will be transferred to the reserves, joining the FF-1052 frigates they now operate. Our reserve frigate force will eventually total 24 FFG-7s and FF-1052s.

#### (2) Destroyers

Our fleet now contains 31 DD-963-class destroyers. We are requesting authorization of only one more of these ships through FY 1988. We may need to expand the force in future years, however, to provide ASW support for the new carriers we will deploy.

#### (3) Multiproduct Ship

The battle-group concept of operations requires one multiproduct ship (AOE/AOR) for each carrier, to function as a station ship for petroleum, oil, and lubricants (POL); ammunition; and stores.

Beginning in FY 1986, we will procure additional AOEs in order to align the number of station ships -- now at 11 -- with the number of aircraft carriers.

(4) Fleet Oilers

In order to keep the station ships adequately supplied with marine diesel fuel and aviation fuel, fleet oilers must perform shuttle services between the battle groups and forward bases. The average age of the oilers in the Military Sealift Command now exceeds 30 years. The TAO construction program, begun in FY 1982, will provide replacements for these ships. A total of 19 TAOs are included in our five-year shipbuilding plan.

(5) Fleet Tenders

To alleviate the projected shortfall in surface fleet tenders in the late 1980s, we have requested funds for two destroyer tenders (AD) in our FY 1984-88 shipbuilding program.

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| Fleet Oilers | | | | |
| Procurement: | | | | |
| Quantity | 1 | 1 | 3 | 4 |
| $ Millions | 199.1 | 163.8 | 524.6 | 921.5 |

(6) Mine Warfare Forces

The Soviet Union maintains the world's largest and most advanced inventory of naval mines. Our aging fleet of 21 ocean-going minesweepers (MSOs) is only marginally effective against this threat. We also have fewer airborne mine countermeasures helicopters than our objectives require. While our allies deploy numerous and highly capable mine countermeasures forces, which we depend upon, we must ensure that the forces we contribute are effective against the mine warfare threat. To improve our mine countermeasures capabilities, we are procuring two new classes of ships and new minesweeping helicopters.

We are also requesting funds for several programs that will improve our offensive mining capability. Improved mines will allow us to exploit more fully the geographical constraints facing Soviet naval forces.

(a) Mine Countermeasures (MCM) Ships

The lead ship in our new MCM-1 ship program, the AVENGER, is about to begin construction. MCM-1 ships will improve our minesweeping capability as well as provide a capability to hunt and neutralize advanced Soviet mines. The Congress has funded two of these ships through FY 1983. Our five-year program requests funding for 12 additional ships.

This year we are also requesting authorization of the lead ship of a new class of smaller mine-hunters, the MSH-1, designed to augment MCM-1 ships during initial clearance and harbor breakout operations. Our five-year program requests funds for 13 MSHs, toward a program goal of 17 ships.

(b) Mine Countermeasures (MCM) Helicopters

We have begun development of a modified version of the CH-53E cargo helicopter, the MH-53E, for use in airborne mine countermeasures operations. Our program goal calls for production of 51 of these aircraft, with initial procurement scheduled for FY 1985.

(c) Mines

The FY 1984-88 program continues procurement of three types of mines: Captor, the Submarine-Launched Mobile Mine (SLMM), and Quickstrike. We are also investigating options to upgrade Quickstrike and SLMM to provide a wider variety of target detection devices. Completion of these programs will add significantly to our offensive mine warfare capability.

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| MCM-1 Ships | | | | |
| Procurement: | | | | |
| Quantity | 1 | 1 | 4 | 4 |
| $ Millions | 98.9 | 118.0 | 390.4 | 356.7 |
| MSH-1 Ships | | | | |
| Procurement: | | | | |
| Quantity | -- | -- | 1 | -- |
| $ Millions | -- | -- | 65.0 | .4 |
| Captor Mines | | | | |
| Development: | | | | |
| $ Millions | 2.5 | 10.5 | 15.9 | 4.6 |
| Procurement: | | | | |
| Quantity | 400 | 300 | 300 | 475 |
| $ Millions | 121.5 | 106.2 | 115.4 | 174.7 |
| SLMM | | | | |
| Procurement: | | | | |
| Quantity | 101 | 266 | 242 | 280 |
| $ Millions | 11.5 | 23.6 | 22.5 | 23.9 |
| Quickstrike Mines | | | | |
| Development: | | | | |
| $ Millions | 7.5 | 9.7 | 7.3 | 7.3 |
| Procurement: | | | | |
| Quantity | | | | |
| $ Millions | 20.6 | 32.9 | 40.0 | 49.5 |

3. Conclusion

Our FY 1984-88 Navy programs will lead to significant improvements in our nation's maritime power. Additional carrier battle groups, increasingly centered around highly capable NIMITZ-class carriers, will support our global strategy in peacetime and in war. Cruise missiles, deployed on a variety of platforms, will provide increased and more diversified offensive firepower. Our global maritime strategy will also be enhanced through the greater use of land-based forces to protect vital sea lanes from attacks by Soviet long-range bombers. And the expansion of our amphibious assault forces will strengthen our global power-projection capability.

## TABLE III.B.2

## FY 1984-88 Shipbuilding Program

| TYPE OF SHIP | FY 1984 | FY 1985 | FY 1986 | FY 1987 | FY 1988 | FY 84-88 Five-Year Total |
|---|---|---|---|---|---|---|
| TRIDENT (Ballistic Missile Submarine) | 1 | 1 | 1 | 1 | 1 | 5 |
| SSN-688 (Attack Submarine) | 3 | 4 | 4 | 5 | 5 | 21 |
| CVN (Aircraft Carrier-Nuclear) | - | - | - | - | 1 | 1 |
| CV (Aircraft Carrier) SLEP | - | 1 | - | 1 | - | 2 |
| BB (Battleship) Reactivation | - | 1 | 1 | - | - | 2 |
| CG-47 (Guided Missile Cruiser) | 3 | 3 | 3 | 3 | 2 | 14 |
| DDG-51 (Guided Missile Destroyer) | - | 1 | - | 3 | 5 | 9 |
| DD-963 (Destroyer) | - | - | - | - | 1 | 1 |
| LSD-41 (Landing Ship Dock) | 1 | 2 | 2 | 2 | 2 | 9 |
| LHD-1 (Amphibious Ship) | 1 | - | 1 | - | 1 | 3 |
| LPDX (Landing Platform Dock) | - | - | - | - | 1 | 1 |
| AMPHIB SLEP | - | - | 1 | 3 | 3 | 7 |
| MCM-1 (Mine Countermeasures Ship) | 4 | 4 | 4 | - | - | 12 |
| MSH-1 (Mine Hunter-Sweeper) | 1 | - | 4 | 4 | 4 | 13 |
| AOE-1 (Multipurpose Stores Ship) | - | - | 1 | 1 | 1 | 3 |
| AE (Ammunition Ship) | - | - | 1 | 1 | 1 | 3 |
| AFS (Stores Ship) | - | - | - | 1 | - | 1 |
| AD (Destroyer Tender) | - | - | - | 1 | 1 | 2 |
| TOA (Oiler) | 3 | 4 | 4 | 4 | 4 | 19 |
| TARC (Cable Ship) | - | - | 1 | - | - | 1 |
| TAGOS (SURTASS) | - | 2 | 2 | 2 | - | 6 |
| TAGS (FBM Support Ship) Conversion | - | 2 | - | - | - | 2 |
| TAK (Cargo Ship) Conversion | - | 1 | - | - | - | 1 |
| TAGM (Range Instrumentation Ship) Conversion | - | - | 1 | - | - | 1 |
| TAFS (Stores Ship) Acquisition | 1 | - | - | - | - | 1 |
| TAH (Hospital Ship) Conversion | 1 | - | - | - | - | 1 |
| TAKRX (SL-7) Conversion | 4 | - | - | - | - | 4 |
| New Construction Ships | 17 | 21 | 28 | 28 | 30 | 124 |
| Conversions/SLEPs/ Reactivations | 6 | 5 | 3 | 4 | 3 | 21 |

## C. TACTICAL AIR FORCES

### 1. Introduction

### a. Air Warfare Overview

Our national interests and global commitments require a strong forward defense posture. The United States must maintain the capability to respond rapidly to aggression with forces of sufficient strength and firepower to ensure a victorious outcome. Our tactical air forces have been equipped and structured to fulfill that requirement and, in conjunction with our land and naval forces, to preserve a global balance of power that serves our national security interests.

The recent conflicts in Lebanon and the South Atlantic have demonstrated how a properly trained and equipped tactical air force can quickly destroy land and sea targets, as well as provide an air defense umbrella for ground force operations. While the lessons of those conflicts are still being studied in detail, the impressive performance of the Israeli F-16s and F-15s in destroying the Syrian MiG fighter force and surface-to-air missile air defense systems underscores the capabilities of our modern fighters and the importance of highly trained pilots. The benefits of continued modernization of our tactical air forces with F-15, F-16, F-18, and AV-8 aircraft, as well as our increased commitment to training, are readily apparent.

### b. Program Goals

Our policy of maintaining a superior tactical air force in support of our national security objectives and treaty commitments requires continuing improvements in combat effectiveness. With that goal in mind, we have carefully structured the FY 1984-88 program to balance improvements in readiness and sustainability with a continuing modernization program and a modest expansion of the force structure. The program gives priority to four broad objectives:

- -- Improving the combat readiness and sustainability of our tactical air forces by increasing their stocks of weapons, munitions, and spare parts, as well as training;
- -- Modernizing the active and reserve components with F-15, F-16, F-18, and AV-8 aircraft as well as with newer air-to-air and air-to-ground weapons;
- -- Enhancing electronic warfare and air defense suppression capabilities; and
- -- Improving target acquisition, surveillance, warning, and reconnaissance capabilities.

### c. Tactical Air Force Structure

Our tactical air forces are structured and planned for a wide variety of missions and roles, involving operations over land and sea. Their organizational structure is summarized below:

### (1) Air Force Tactical Aircraft

The Air Force fighter force structure consists of 25 active wing equivalents and the equivalent of nearly 12 Air National Guard (ANG) and Air Force Reserve (AF Res) wings. Each wing typically contains three squadrons of 24 aircraft each. Combat support units, such as those composed of electronic warfare EF-111 aircraft, are generally organized into squadrons of 18 to 24 aircraft. By FY 1988, we expect to have the equivalent of nearly 28 fully equipped active wings and just over 13 ANG and AF Res wings.

In addition to fighter forces, the active and reserve components of the Air Force operate the following types and numbers of special purpose tactical squadrons: electronic warfare (2), defense suppression (1), reconnaissance (8), tactical command and control (11), and special operations (8). By FY 1988, we will have added one defense suppression squadron, six reconnaissance squadrons, and two tactical command and control squadrons, while having increased the quality of our special operations squadrons.

### (2) Navy/Marine Corps Tactical Aircraft

Unlike Air Force wings, which generally consist of only one type of aircraft, Navy and Marine Corps air wings are task-oriented and include a mix of aircraft types.

A typical active Navy carrier air wing includes the following types and numbers of aircraft:

| Aircraft Type | Function | Squadron | Aircraft |
|---|---|---|---|
| F-4, F-14 (TARPS*) | Fighter (Reconnaissance) | 2 | 24 |
| A-7, F/A-18 | Light Attack | 2 | 24 |
| A-6, KA-6D | Medium Attack, Tanker | 1 | 14 |
| S-3A | Anti-Submarine Warfare (Fixed Wing) | 1 | 10 |
| SH-3H | Anti-Submarine Warfare (Rotary Wing) | 1 | 6 |
| EA-6B | Electronic Warfare | 1 | 4 |
| E-2B/C | Airborne Early Warning | 1 | 4 |

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*Tactical Air Reconnaissance Pod System (TARPS). Three F-14s per aircraft carrier will carry this system to provide a tactical reconnaissance capability.

While the wing configuration outlined above is expected to remain the norm, we plan to experiment with specialized, mission-oriented force mixes, featuring fighter and medium-attack units, in the near future.

An active Marine Corps air wing typically consists of the following elements:

| Aircraft Type | Function | Squadron | Aircraft |
|---|---|---|---|
| F-4, F/A-18 | Fighter/Attack | 4 | 48 |
| A-4, AV-8A/B/C | Light Attack | 2-3 | 38-57 |
| A-6 | Medium Attack | 1-2 | 10-20 |
| KC-130 | Tanker/Transport | 1 | 12 |
| EA-6B | Electronic Warfare | 1 | 4 |
| RF-4 | Reconnaissance | 1 | 7 |
| TAC-A | Tactical Air Control-Airborne | 1 | 10 |
| OV-10 | Observation | 1 | 12 |
| AH-1 | Attack Helicopter | 1 | 24 |
| CH-53, CH-46 | Transport/Utility | 9 | 120 |
| UH-1 | Helicopters | 6-7 | 131 |

Our five-year program funds two additional active Navy carrier air wings -- one during FY 1983-85 and the other in FY 1987 -- bringing the total to 14 active wings by the end of FY 1987. We will also maintain three active Marine Corps air wings, two Navy reserve wings, and one Marine reserve wing throughout the program period.

## 2. FY 1984-88 Programs

Our Five-Year Defense Program (FYDP) was formulated with an awareness of the limited resources available and the need to balance the allocation of resources among the most urgent priorities. The tactical air force's portion of this program required many difficult choices. For example, we had to balance the production rates for new aircraft against readiness needs, such as additional aircraft flying hours and spare parts. The program pursues, in general order of priority, improvements in the following areas: readiness and sustainability; modernization; electronic warfare and air defense suppression; and target acquisition, surveillance, warning, and reconnaissance.

### a. Improving Combat Readiness and Sustainability

In recent years, the combat readiness of our tactical air forces fell below desired levels, as measured by the low number of aircraft units rated as fully combat ready. Combat readiness is determined by the amount of equipment and supplies on hand, as well as by personnel and training levels. Our first priority in the FY 1984-88 program is to improve both the near- and long-term combat readiness, as well as the sustainability, of our tactical air forces.

### (1) Combat Readiness

#### (a) Equipment and Supplies

We will continue to fund initiatives over the next five years to eliminate peacetime operating spares deficits and to reduce service maintenance backlogs.

To contain depot maintenance backlogs, we have provided additional funds and civilian manpower for the Depot Purchased Equipment Maintenance (DPEM) program. Special emphasis has been placed on providing additional funds for aviation component repair. These actions will improve our replacement item processing and repair capabilities, while enhancing the ability of the Air Force Logistics Command and the Naval Air Rework Facilities to respond to a wartime surge. Our program also funds maintenance manpower authorization increases for the tactical fighter units. The additional billets will support wartime sortie rate requirements during the initial days of conflict, while also helping to meet our overall tactical force modernization requirements. (The Materiel Readiness chapter of this report provides more detail on these programs.)

#### (b) Personnel and Training

Total flying hours are an important aggregate measure of force training and readiness levels. An increase in tactical flying hours translates directly into increased aircrew combat capability. Largely because of their significant advantage in average flying time per crew member, our tactical aircrews continue to be considered superior to Warsaw Pact aviators. In FY 1983, our tactical Air Command pilots will average roughly 210 flying hours per year, compared to only about 120 hours for Soviet pilots. Furthermore, U.S. aircrews enter combat units with more weapon system training than do Soviet crews. However, since we depend heavily upon our tactical air forces to offset the Warsaw Pact's significant advantage in ground forces, a further increase in flying time is necessary for our aircrews so that they can achieve their full combat potential. Our program goal for the active Air Force fighter/attack aircrews is an average of about 240 flying hours per year by FY 1984, varying by aircraft type. The funding levels contained in our five-year program will ensure that we attain and sustain this level of training.

The Navy, on the other hand, has been forced by recent fiscal constraints and relative priorities to program a decrease in the peacetime training rates for its tactical aircrews. In general, the average annual flying hours per crew will decline from about 288 in FY 1982 to about 240 in FY 1984 and beyond. With this reduction, annual Navy flying hours per crew will approximate those of the Air Force's Tactical Air Command.

In addition to funding increases in flying hours, we are continuing to emphasize realism in training. Experience has shown that a high level of realistic peacetime training gives aircrews important early wartime advantages over less-skilled adversaries. Instrumented Air Combat Maneuvering Ranges, now coming into fairly widespread use, offer U.S. and allied aircrews a unique and realistic training aid. Joint Service exercises, in which Air Force units conduct integrated operations with Army and Navy forces, are another important means of providing realistic training to increase the combat proficiency of our tactical aircrews. Air Force, Navy, and Marine Corps active and reserve units regularly participate in the large-scale

"Red Flag" exercises held at Nellis Air Force Base, Nevada; the "Cope Thunder" exercises conducted at Clark Air Force Base, the Philippines; and the combined-arms, live-fire exercises held at the Marine Corps Air Station at Yuma, Arizona.

### (2) Force Sustainability

Sustainability has been given a high priority in our five-year program. Our shift in policy to plan for the possibility of a global, extended war with the Soviets requires accelerated improvement in this area. Our current program is designed to reach a 60-day sustainability goal for spare parts and munitions by FY 1987. Therefore, for the Air Force, we have funded War Readiness Supply Kits (WRSK), Base Level Supply Sufficiency (BLSS) items, War Reserve Materiel (WRM) munitions, and Other War Reserve Materiel (OWRM) requirements. In a similar fashion, we have increased funding for the Navy's Aviation Consolidated Allowance Lists (AVCAL). These efforts will sustain our tactical air forces in the European and Korean theaters and our rapid deployment forces in other potential conflict regions during the early stages of a conflict.

Consistent with our sustainability goal, our five-year program gives mobility a high priority. We have programmed additional funds to begin construction of facilities to preposition aircraft support and materiel-handling equipment and flightline support vehicles in Europe and Southwest Asia, and to increase munitions and petroleum, oil, and lubricants (POL) storage capabilities. (The Mobility Forces and Materiel Readiness chapters discuss these programs in more detail.)

### b. Force Modernization

Our modernization program for the tactical air forces has been structured to meet three goals: to increase combat capability, to reduce the average age of the force, and to permit a modest force expansion. Though there are many variables that affect our goals for aircraft age, an average age of 10 to 11 years is considered acceptable for the Air Force. For Navy and Marine Corps aircraft, an average age of 8 to 9 years is preferred because of the high stress of carrier operations. By 1988, the average age of aircraft in the active elements of the Air Force, Navy, and Marine Corps will be about 9 years, but about 15 years in the reserve elements of all three Services. For the Navy/Marine Corps active and reserve forces, this represents a decline of about one year over the five-year period. For the Air Force, it represents an increase of about one year, although the average age of tactical aircraft in the Air Force inventory will still be lower than the plans of the previous Administration would have provided. Force age could be reduced even further if we did not also need to expand both the Air Force and the Navy tactical air forces, thus necessitating retention of older aircraft in the reserves.

### (1) Air Force

Our Air Force modernization program funds improvements for both the active and reserve tactical fighter and air defense forces. We have programmed funds in FY 1984 to procure 48 F-15s and 120 F-16s. The F-15 procurement will support formation of about one and one-half F-15C/D tactical fighter squadrons, freeing earlier-model aircraft for transfer to NORAD-allocated air defense units; the F-16 procurement will permit continued modernization and growth of the active and reserve forces. The F-16s are slated primarily to replace F-4s in the active force; these, in turn, will be used to replace older aircraft, such as early model F-4s, in the Air National Guard and Air Force Reserve. One ANG unit in FY 1983 and one AF Res unit in FY 1984 are scheduled to receive F-16s.

We would prefer to procure F-15s and F-16s at higher, more efficient rates in FY 1984 to accelerate the modernization plan for the reserve force, but cannot do so because of current fiscal constraints. Eventually, however, our five-year program will permit us to procure fighter aircraft at these more efficient rates. In FY 1986, F-15 procurement is projected to reach 96 aircraft per year, and F-16 procurement will rise to 180 aircraft per year. We also intend to continue procurement of both of these aircraft through the end of the decade.

While our current F-15 and F-16 aircraft will provide satisfactory air-to-air performance against the Soviet aircraft threat of the 1980s, we must pursue a vigorous modernization program to preserve our advantage in the latter half of the decade, when the Soviets are expected to deploy a new generation of fighter aircraft with improved air-to-air combat capabilities. Therefore, our FY 1984-88 program provides continued funding for several weapons development programs, such as the Advanced Medium-Range Air-to-Air Missile (AMRAAM), which will provide the F-16 with a night/ all-weather, radar-missile capability and improve both F-15 and F-16 survivability in beyond-visual-range (BVR) engagements. We also are considering modifying the airframes of our existing F-15s and F-16s to improve their capabilities. Finally, we have begun studies of Advanced Tactical Fighter (ATF) concepts that could lead to introduction of a new aircraft type by the early 1990s.

Our special operations forces will be quantitatively and qualitatively improved during this period. We will procure 11 additional MC-130 deep-penetration aircraft and add to our medium- and heavy-lift vertical takeoff and landing (VTOL) capabilities with 10 HH-60D helicopters. Improvements to existing fixed-wing aircraft will enhance their penetration capabilities.

The following paragraphs provide additional detail on the major modernization effects being pursued as part of our Air Force program:

F-15 (Eagle) -- Designed as the Air Force's air superiority fighter, the F-15 is capable of operating well into enemy airspace in all weather conditions. The current program proposes to acquire 408 additional F-15s through FY 1988, and we plan to continue buying the aircraft into the early 1990s. Development funds are programmed for an air-to-surface derivative with enhanced range, payload, and delivery capabilities.

F-16 (Fighting Falcon) -- A multirole aircraft, the F-16 is designed to complement the F-15 as an air superiority fighter. We plan to procure 120 F-16s in FY 1984 as part of a 480-aircraft multiyear procurement program (FY 1982-85), and to increase production to 180 aircraft per year in FY 1986 and beyond. We are also continuing development of a cranked-arrow-wing version that will greatly expand the F-16's range and stores capability. We are conducting an operational comparison between the F-15 and F-16 air-to-surface derivatives, and may choose to procure only one of them as a dual-role fighter.

MC-130H (Combat Talon II) -- A modified C-130 aircraft, the MC-130H is equipped with precision-navigation, terrain-following, and self-protection systems designed for use in special operations, at low altitudes and at night. Over the next five years, we are requesting funds to buy 11 more of these aircraft, nearly doubling the capabilities of our three existing squadrons.

HH-60D (Nighthawk) Helicopters -- Improved avionics incorporated in the "D" model of this VTOL aircraft will extend our medium-lift capability for rescue and special operations through the 1990s.

JVX -- A description of this aircraft is included in the Land Forces chapter. The avionics package in the Air Force version will enable it to replace the HH-53 Pave Low II in the 1990s and add to the deep penetration capabilities required for special operations.

LANTIRN -- Currently under development, the LANTIRN system is designed to acquire enemy targets in day or night and relay the target information to air-launched weapons. The system will provide the F-16 and A-10 with night/under-the-weather navigation capability, in addition to increasing their conventional munitions, laser-guided bomb (LGB) and Maverick missile delivery capability.

IIR Maverick -- An anti-armor air-to-surface missile, the IIR Maverick is an updated version of the current TV-guided model. The IIR version uses an imaging infrared seeker for guidance, expanding its capability in the night-attack role.

Advanced Medium-Range Air-to-Air Missile (AMRAAM) -- This new, all-environment, air-to-air missile will have an active radar seeker, giving it a "launch-and-leave" capability. AMRAAM can operate independently of the aircraft's radar system, enabling an aircraft carrying several of these missiles to engage multiple targets on a single intercept. The missile's increased average velocity, together with its launch-and-leave capability, will serve to reduce aircrew vulnerability. AMRAAM is being developed for use by both the Air Force and the Navy as a follow-on to the AIM-7.

AIM-7M -- An all-weather, air-to-air missile designed for use with both Air Force and Navy aircraft, the AIM-7M relies on semi-active radar guidance to home in on its target. First procured in FY 1980, the "M" model has greater electronic countermeasures resistance and look-down/shoot-down capabilities than the earlier "F" version.

AIM-9M -- An infrared-guided air-to-air missile deployed by both the Air Force and the Navy, the AIM-9M incorporates improved background discrimination and countermeasures capabilities over earlier versions. New improvements this year include a reduced-smoke motor, making it more difficult for an enemy both to see the missile and to "track back" to our aircraft's location, and a closed-cycle cooler, yielding a more sensitive target detector that increases the missile's range.

30mm Anti-Armor Aircraft Guns -- First procured in FY 1980, these pods will provide additional anti-armor capability for the F-4 and A-7, plus growth potential for other aircraft. By the end of FY 1984, we will have procured a total of 299 of these pods.

Wide-Area Anti-Armor Munitions (WAAM) -- The FY 1984-88 program continues development of this new family of advanced anti-armor munitions, ranging in type from unguided cluster weapons to terminally guided, dispensed submunitions.

Tactical Aircraft Modifications -- This account funds aircraft modifications to correct problems identified during development or operational use, including changes to enhance the capability of existing aircraft, improve their reliability and maintainability, incorporate operational and safety modifications, and extend their service life. Significant items in the current program include provision of an Inertial Navigation System (INS) for the A-10, a low-smoke engine modification and radar warning receiver update for the F-4, and final installation of electronic warfare conversion kits for the EF-111. Additionally, under the Compass Call program, we are modifying 16 C-130 aircraft to provide them with a command, control, and communications jamming capability.

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| F-15 | | | | |
| Development: | | | | |
| $ Million | 32.3 | 104.8 | 117.8 | 68.8 |
| Procurement: | | | | |
| Quantity | 36 | 39 | 48 | 72 |
| $ Million | 1,154.5 | 1,481.0 | 2,127.4 | 3,112.2 |
| F-16 | | | | |
| Development: | | | | |
| $ Million | 57.3 | 73.5 | 107.4 | 72.8 |
| Procurement: | | | | |
| Quantity | 120 | 120 | 120 | 120 |
| $ Million | 2,231.1 | 2,254.6 | 2,123.6 | 3,164.5 |
| MC-130H | | | | |
| Procurement: | | | | |
| Quantity | -- | 1 | 2 | 2 |
| $ Million | 27.0 | 43.0 | 71.7 | 97.2 |
| HH-60D | | | | |
| Development: | | | | |
| $ Million | 18.8 | 27.3 | 66.6 | 17.9 |
| Procurement: | | | | |
| Quantity | -- | -- | -- | 7 |
| $ Million | -- | -- | 25.9 | 228.1 |
| JVX | | | | |
| Development: | | | | |
| $ Million | -- | -- | 14.4 | 42.9 |

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| LANTIRN | | | | |
| Development: | | | | |
| $ Million | 84.3 | 99.9 | 89.9 | 96.4 |
| Procurement: | | | | |
| Quantity | -- | -- | -- | 45 |
| $ Million | 5.0 | 15.7 | 4.6 | 208.2 |
| IIR Maverick | | | | |
| Development: | | | | |
| $ Million | 22.7 | 4.4 | 1.5 | 0 |
| Procurement: | | | | |
| Quantity | 200 | 900 | 2,600 | 5,729 |
| $ Million | 222.2 | 248.9 | 349.8 | 720.1 |
| AMRAAM | | | | |
| Development: [1] | | | | |
| $ Million | 139.8 | 211.2 | 195.4 | 245.3 |
| Procurement: | | | | |
| Quantity | -- | -- | -- | 224 |
| $ Million | -- | -- | 62.6 | 427.4 |
| AIM-7M | | | | |
| Procurement: | | | | |
| Quantity | 966 | 1,165 | 1,005 | -- |
| $ Million | 222.3 | 206.9 | 187.2 | -- |
| AIM-9M | | | | |
| Procurement: | | | | |
| Quantity | 700 | 500 | 450 | 1,000 |
| $ Million | 51.7 | 41.8 | 30.8 | 65.3 |
| 30mm Guns | | | | |
| Procurement: | | | | |
| Quantity | 104 | 75 | 80 | -- |
| $ Million | 43.7 | 29.5 | 28.9 | -- |
| WAAM | | | | |
| Development: | | | | |
| $ Million | 18.6 | 13.7 | 52.2 | 96.0 |
| Tactical Aircraft Modifications | | | | |
| $ Million | 618.9 | 630.5 | 607.6 | 943.7 |

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[1] Includes Air Force and Navy funding.

(2) Navy and Marine Corps

Our FY 1984-88 defense program will continue to improve both Navy and Marine Corps warfighting capabilities. We are committed to significant improvements in our maritime force, and our aircraft procurement plan carefully balances near- and long-term requirements. Over the next five years, we plan to buy 920 Navy and Marine Corps tactical fighter and attack aircraft. This procurement schedule will allow us to reach the goal of 14 active carrier air wings mentioned earlier.

The 562 F/A-18s that are programmed during the FY 1984-88 planning period represent over 50% of the tactical aircraft funded by the Navy. The F/A-18 will be introduced into Marine fighter/attack and Navy light-attack squadrons in FY 1983. When this program is completed in the 1990s, all 28 Navy light-attack squadrons and all 12 Marine Corps fighter/attack squadrons, as well as four Navy fighter squadrons, will be equipped with F/A-18s. All of our F-14 fighter force will be deployed on large-deck carriers. While our combined force of F-14s, A-6s, and F/A-18s will be organized into carrier wings consisting of fighter, light-attack, and medium-attack squadrons, these wings can be tailored to meet specific mission needs. In the near future, we will experiment with operating specialized carrier air wings composed of various mixes of fighter and medium-attack squadrons.

The Marine Corps will procure new AV-8Bs for its active light-attack forces, freeing older A-4Ms for transfer to reserve units.

Our procurement program will allow the Navy to arrest the aging of its active fighter and light attack forces. But by the early 1990s, the fighter and light-attack aircraft in Navy and Marine Corps reserve units will need to be replaced. The earlier versions of the F/A-18 could then be transferred to these units, where they would replace older F-4 and A-7 aircraft.

The following paragraphs provide additional detail on the major modernization efforts being pursued as part of the Navy/Marine Corps program:

F-14 -- The Navy's most capable interceptor, the F-14 is an all-weather aircraft designed for the fleet air defense mission. It is the only aircraft in the Navy's inventory that can carry the long-range Phoenix air-to-air missile, and is intended primarily to protect carrier battle groups against long-range Soviet bomber and cruise missile attacks. We are requesting continued procurement funding to support our force objective of providing two F-14 squadrons for each large-deck carrier air wing.

F/A-18 -- The newest addition to the Navy's inventory, the F/A-18 is a multipurpose aircraft, capable of employment in both the fighter and attack roles. Designed to replace older Navy and Marine Corps F-4s and Navy A-7s, it may also serve as a new tactical reconnaissance aircraft. Eventually, it will be used to modernize Navy and Marine Corps reserve squadrons.

A-6E -- Continued procurement of this all-weather/night attack aircraft will permit us to achieve and maintain programmed force levels, while continuing to convert older A-6s to KA-6 tankers.

AV-8B -- A light-attack aircraft, the AV-8B incorporates improvements over the AV-8A in gross takeoff weight and performance. The AV-8B is slated to replace AV-8A/Cs and A-4Ms in Marine Corps units.

AIM-7M -- (Discussed under Air Force programs.)

AIM-9M -- (Discussed under Air Force programs.)

IIR Maverick -- The Navy version of this imaging infrared missile features fusing options selectable from the cockpit and a warhead designed for hardened sea, port, and land targets.

AIM-54A/C -- An all-weather, air-to-air missile, the AIM-54A/C is intended primarily for long-range attack of bombers before they can launch cruise missiles against ship targets. First procured in FY 1980, the "C" model has improved electronic counter-countermeasures features relative to earlier versions.

Tactical Aircraft Modifications -- This account funds aircraft modifications to correct problems identified during development or initial operational use, or to enhance the capability of existing aircraft. Significant items in the current program include the following system subsystems: A-6 inertial navigation, rewing, and Target Recognition Attack Multi-Sensor (TRAM); A-7 Forward Looking Infrared (FLIR) sensor and TF-41 engine; F-14 TF-30 engine improvement program, AWG-9 programmable signal processor, and Television Control Set (TCS); EA-6B (ICAP II) EW capability improvements; and E-2C improved antenna (TRAC-A).

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| F-14 | | | | |
| Development: | | | | |
| $ Million | 19.7 | 21.7 | 45.7 | 85.7 |
| Procurement: | | | | |
| Quantity | 30 | 24 | 24 | 24 |
| $ Million | 1,176.0 | 1,120.2 | 1,149.6 | 1,342.1 |
| F/A-18 | | | | |
| Development: | | | | |
| $ Million | 194.0 | 109.1 | 27.2 | 88.0 |
| Procurement: | | | | |
| Quantity | 63 | 84 | 84 | 92 |
| $ Million | 2,422.2 | 2,483.4 | 2,726.2 | 3,000.9 |

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| A-6E | | | | |
| Development: | | | | |
| $ Million | 10.0 | 11.4 | 37.7 | 42.1 |
| Procurement: | | | | |
| Quantity | 12 | 8 | 6 | 6 |
| $ Million | 283.2 | 244.3 | 232.3 | 216.4 |
| AV-8B | | | | |
| Development: | | | | |
| $ Million | 231.4 | 113.8 | 118.2 | 12.2 |
| Procurement: | | | | |
| Quantity | 12 | 21 | 32 | 48 |
| $ Million | 667.3 | 917.5 | 1,047.6 | 1,321.7 |
| AIM-7M | | | | |
| Development: | | | | |
| $ Million | 5.0 | -- | -- | -- |
| Procurement: | | | | |
| Quantity | 321 | 285 | 325 | 844 |
| $ Million | 70.6 | 59.4 | 71.9 | 153.7 |
| AIM-9M | | | | |
| Development: | | | | |
| $ Million | 0.6 | -- | -- | 15.2 |
| Procurement: | | | | |
| Quantity | 1,800 | 1,920 | 1,700 | -- |
| $ Million | 136.8 | 114.8 | 105.9 | -- |
| IIR Maverick | | | | |
| Development: | | | | |
| $ Million | 10.2 | 1.0 | 19.6 | 7.8 |
| Procurement: | | | | |
| Quantity | -- | -- | -- | 290 |
| $ Million | -- | -- | -- | 30.6 |
| AIM-54A/C | | | | |
| Development: | | | | |
| $ Million | 31.5 | 22.8 | 4.0 | -- |
| Procurement: | | | | |
| Quantity | 72 | 108 | 324 | 464 |
| $ Million | 162.6 | 260.7 | 454.6 | 520.7 |

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| Tactical Aircraft Modification | | | | |
| Modifications: $ Million | 803.8 | 995.7 | 1,246.1 | 1,876.6 |

c. Enhancing Electronic Warfare and Air Defense Suppression Capabilities

Our FY 1984-88 program requests funding for a balanced mix of lethal and nonlethal systems designed to neutralize, disrupt, and destroy critical elements of the enemy's integrated air defense system.

The High-Speed Anti-Radiation missile represents a significant improvement over our present anti-radiation weapons, such as Shrike; while the Precision Location Strike System, when coupled with the F-4G (Wild Weasel) or other weapon systems, can locate and selectively destroy enemy air defense systems. Our newest electronic warfare systems employ the most advanced technology available, allowing us to detect and attack enemy targets more quickly. The extremely fast processors of these systems can be programmed for specific mission targets -- a capability that is unmatched by any other military force. Finally, our new communications systems (Voice, Data, and Identification) not only employ the most effective technology available, but also, through preplanned product improvement ($P^3I$) initiatives, can be upgraded to take advantage of continuing technological advances.

The following paragraphs provide additional detail on our programs in this area:

High-Speed Anti-Radiation Missile (HARM) -- The HARM air-to-surface missile is designed to suppress or destroy the land- and sea-based radars of enemy air defense systems. The missile is being developed under a joint Navy/Air Force program.

Precision Location Strike System (PLSS) -- PLSS is designed to locate, identify, and guide applicable munitions or weapon system strikes on enemy air defense emitters in all weather conditions from standoff ranges. Currently under development by the Air Force, the system is scheduled to become operational in the mid-1980s.

Airborne Self-Protection Jammer (ASPJ) -- This joint Navy/Air Force program will provide many of our tactical aircraft with an internal electronic countermeasures system.

Anti-Jam Secure Voice, Data, and Identification Friend/Foe (IFF) Systems -- The Joint Tactical Information Distribution System (JTIDS) is being developed to provide a secure, jam-resistant, digital information system for tactical use by all the Services. The United Kingdom also plans to deploy JTIDS on selected platforms (e.g., Nimrod and Tornado aircraft). Initial operating capability (IOC) is scheduled for the late 1980s. As an interim response to the jamming threat, we are modifying the UHF radios in our tactical aircraft with the Have Quick system. More than 1,000 aircraft have been equipped with this system over the past year. At the Congress' direction, the Air Force has terminated the Seek Talk anti-jam radio system program, and is evaluating several alternative approaches to provide a secure voice system for the tactical air forces by the late 1980s. The preferred alternative, called Have Clear, will be described in a study to be sent to the Congress in April. The Air Force is also developing a Combat Identification System for use by all four Services and by our NATO allies. Integration of these voice/data/identification systems into a common, modular design is also being pursued.

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| **HAPM** | | | | |
| Development: | | | | |
| $ Million | 25.2 | 6.7 | 11.1 | 8.7 |
| Procurement: | | | | |
| Quantity | 236 | 258 | 517 | 1,546 |
| $ Million | 202.5 | 256.7 | 380.3 | 676.3 |
| **PLSS** | | | | |
| Development: | | | | |
| $ Million | 79.5 | 78.7 | 69.7 | 69.1 |
| Procurement: | | | | |
| Quantity | -- | -- | -- | 50 |
| $ Million | 1.7 | 1.8 | 9.1 | 80.0 |
| **EA-6B** | | | | |
| Development: | | | | |
| $ Million | 10.7 | 12.7 | 23.8 | 31.6 |
| Procurement: | | | | |
| Quantity | 6 | 6 | 6 | 6 |
| $ Million | 275.8 | 332.5 | 442.3 | 433.9 |
| **ASPJ** | | | | |
| Development: | | | | |
| $ Million | 77.8 | 76.0 | 89.6 | 47.9 |
| Procurement: | | | | |
| $ Million | -- | -- | 24.3 | 318.9 |
| **JTIDS** | | | | |
| Development: | | | | |
| $ Million | 133.0 | 173.8 | 171.3 | 189.1 |
| Procurement: | | | | |
| Quantity | -- | -- | -- | -- |
| $ Million | 26.3 | 25.6 | 21.9 | 202.5 |

### d. Improving Target Acquisition, Surveillance, Warning, and Reconnaissance Capabilities

The location, identification, and destruction of enemy air defenses and other ground targets is important to effective tactical air operations, and, therefore, to the outcome of the battle.

The following paragraphs provide detail on the major programs we are pursuing to improve our capabilities in this area:

E-3A (AWACS) -- This aircraft is equipped with a long-range, look-down radar with substantial jamming resistance. Capable of detecting both air and ground targets and of managing multiple fighter and attack aircraft sorties, the AWACS provides the Air Force with improved surveillance, warning, and control capabilities for use in North American air defense, as well as in tactical theaters of operation. The AWACS also represents a valuable supplement to our naval forces in performing the sea-lane defense mission.

E-2C -- This aircraft provides the Navy with airborne early warning and command and control capabilities for sea control and air defense missions.

TR-1 -- This aircraft, a derivative of the U-2, is designed to provide the Air Force with continuous, all-weather surveillance of the battle area. Its airframe is compatible with the PLSS equipment now under development by the Air Force. The FY 1984-88 program requests funding for PLSS aircraft and associated TR-1 ground processing facilities.

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| E-3A | | | | |
| Development: | | | | |
| $ Million | 51.8 | 67.0 | 69.1 | 65.2 |
| Procurement: | | | | |
| Quantity | 2 | 2 | 0 | 3 |
| $ Million | 262.1 | 149.5 | 76.2 | 456.9 |
| E-2C | | | | |
| Development: | | | | |
| $ Million | 18.1 | 52.2 | 54.4 | 44.6 |
| Procurement: | | | | |
| Quantity | 6 | 6 | 6 | 6 |
| $ Million | 262.8 | 293.5 | 345.8 | 347.0 |
| TR-1 | | | | |
| Procurement: | | | | |
| Quantity | 4 | 4 | 5 | 4 |
| $ Million | 138.6 | 175.2 | 236.3 | 177.7 |

## 3. Conclusion

Our five-year program for the tactical air forces emphasizes increased combat readiness and sustainability, modernization of the active and reserve components, enhancements in electronic warfare and air defense suppression capabilities, and improvements in surveillance and reconnaissance capabilities. We will improve the effectiveness of our existing weapon systems through better training, improved logistics, and high-technology modifications. Our program to modernize and expand the force with technologically superior aircraft, missiles, and munitions will maintain our advantage over our adversaries. Our tactical air forces, backed by improved surveillance and command and control systems, will provide us with a new generation of joint-Service forces, capable of sustained operations over land and sea, in support of "long" as well as "short" wars.

## D. NORTH ATLANTIC TREATY ORGANIZATION (NATO) PROGRAMS

### 1. Introduction

President Reagan has said that our forces are in Europe because the NATO line is our first line of defense. Our participation in the programs described in this section permits the United States to work closely with its NATO Allies in setting and supporting specific directions for NATO's defense effort. Close collaboration with our Allies in developing and implementing these programs helps to ensure the best possible use of available resources.

NATO differs from most previous security alliances. The common operative principle for alliances has been an agreement for allied forces to work together in the event of war. While NATO is based on this common principle, it has gone far beyond this simple agreement by developing in peacetime the necessary arrangements to permit an effective coalition military capability for deterrence and defense.

This additional step of preparing in peacetime for effective coalition defense has led to the establishment of major NATO programs, some aimed at establishing necessary NATO facilities, procedures, and arrangements, others directed at guiding and facilitating the improvement of national forces and their interoperability.

Let me emphasize, however, that NATO common efforts are in no way intended to permit any one nation to reduce its national efforts by "letting NATO do it." NATO defense consists fundamentally of national defense efforts in providing the necessary national forces and in support of agreed NATO programs.

NATO Heads of State and Government gathered at a summit meeting in Bonn, Germany, on 10 June 1982, and agreed on a mandate for strengthening NATO's defense posture, with special regard to conventional forces. Elements of this mandate, as well as other NATO defense programs, arms control approaches, and other issues are discussed below. Where the NATO programs parallel major U.S. defense programs, greater detail will be found in other chapters of this report.

### 2. Current Programs

#### a. Improving NATO Conventional Defense: Emerging Technologies

At their summit meeting in Bonn, NATO Heads of State and Government agreed that NATO should explore ways to take full advantage both technically and economically of emerging technologies, especially to improve conventional defense. The Department of Defense took the lead in preparing a first paper for NATO's consideration. I provided the U.S. paper to our NATO Allies at the meeting of NATO Defense Ministers last December. Follow-on work is now in progress in NATO to draw up specific programs for introduction of selected new technology in the short and mid-term. This NATO action also may facilitate intensified development efforts in the longer term. Overall, I see this as a major opportunity for improvement of NATO's conventional capability, drawing on the technological strength of the West. Periodic reports to NATO Ministers and other reviews will permit us to monitor progress and guide further action.

### b. NATO Force Goals

While the decision to emphasize the role of emerging technologies represents a major area of emphasis in NATO defense planning, the normal and continuing NATO vehicle for guiding national efforts in NATO defense is the NATO Defense Planning System. This system centers around the establishment of NATO force goals and review of national plans to carry out these goals. The force goals for 1983-88, established in the spring of 1982, emphasize conventional force improvements, including replacement and modernization of equipment, some increases in maritime force levels, attainment of adequate stock levels, and improvements in manning levels and training. NATO force goals are drawn up to contain a "challenge level" above national plans. If fully met in all respects, the force goals would offset serious deficiencies in NATO's force capabilities. The Ministerial review of national force plans in December 1982 showed significant national efforts in maintaining and improving national forces, but with some force goals only partially implemented or with full implementation delayed beyond 1988. Defense Ministers will review this situation and any other significant developments when they meet in the coming spring to approve "Ministerial Guidance 1983," which will govern the preparation of new NATO force goals for 1985-90. The U.S. force plans for 1983-87, reviewed at the December 1982 Ministerial meeting of the Defense Planning Committee, go a long way toward fully meeting the NATO force goals for the U.S. We will continue to make every effort to meet NATO force goals in the U.S. force plans for 1984-88, which we will submit to NATO this summer.

### c. NATO Long-Term Defense Program

The NATO Long-Term Defense Program (LTDP) was established by Heads of Government in 1978 outside the normal NATO defense planning system as high-level guidance for defense planning. It represented a decision to emphasize certain specific defense improvement measures within ten selected areas judged to be of critical importance. It has served this purpose well and its programs are continuing; at the Bonn Summit, nations agreed to continue to implement LTDP measures.

Three management features of the LTDP have proved invaluable: analysis by functional area, independent monitors who report directly to the Secretary General on progress in implementation and identification of problem areas, and detailed national reporting on selected measures. We would seek to incorporate these features in any follow-on system.

### d. Coordinated Defense Program

Along with their emphasis on emerging technologies, NATO Heads of Government at the Bonn Summit called for continued efforts to improve NATO planning procedures. NATO follow-up efforts aim at a single annual review for Defense Ministers of all defense planning in NATO. This overall review would take into account not only the NATO Defense Planning System (dealing with NATO force goals and national force plans) but also the independent planning activities carried out by the various NATO committees. Thus, the review would compare progress in the development of national forces with progress in such related areas as NATO infrastructure, NATO communications, cooperative or collective logistics, cooperation in armaments, and support from the civil sector, with problem areas identified for Ministerial consideration and action.

I see this as a very worthwhile effort in making the best use of resources in planning for NATO defense. We are making every effort to assist in the first full review.

### e. NATO Nuclear Planning

Matters concerning the nuclear element of NATO's deterrent and defensive posture are coordinated through the NATO Nuclear Planning Group (NPG). Currently, all members of the Alliance except France and Iceland belong to the NPG. The analysis and recommendations that provided the basis for the December 1979 decision to deploy new Longer-range Intermediate-range Nuclear Force (LRINF) missiles were prepared in a study group under the aegis of the NPG. The same study group, known as the High-Level Group, is now considering the remainder of NATO's land-based nuclear forces, to ensure that they remain an effective deterrent. A parallel study group, working under the aegis of the North Atlantic Council, prepared the basis for the other integral half of the December 1979 decision -- to seek negotiated limits on LRINF missiles with the Soviet Union.

I serve as the U.S. member of the NATO NPG when it meets in Ministerial session, and my colleagues and I find the time devoted to our twice-yearly meetings well spent. The Assistant Secretary of Defense (International Security Policy) serves as Chairman of the High-Level Group.

### f. NATO Air Defense Planning

Air defense is central to the defense of Europe. This field of military planning was selected in 1978 as one of the ten key areas of the LTDP. Planning in this field was given even greater emphasis in the 1979 decision to set up a high-level committee, reporting directly to the North Atlantic Council, to guide national and NATO actions on air defense planning. As a first aim, the NATO Air Defense Committee intends to draw up a revised 15-year air defense program that will take into account the role of France and Greece, as well as the maritime air defense capabilities for the sea areas adjacent to Allied Command Europe (ACE).

The NATO air defense problem is considered serious and is being addressed as a matter or urgency by the Department of Defense, but the solution is really a NATO challenge and involves all Alliance members. There are a number of actions under way in DoD and NATO that we think will help meet NATO's future air defense needs. One approach is a major new counter-air concept that has been formulated by the Under Secretary of Defense for Research and Engineering. This concept is being studied in detail in DoD, and has been referred to NATO for its consideration and development. This counter-air concept addresses the threat of the 1980s and 1990s and includes proposals to integrate new employment ideas with a number of weapon subsystems to enhance NATO's air defense capabilities significantly. In addition to this major thrust, emphasis is being placed on improving air base defense and on Short Range Air Defense (SHORAD) systems and their command and control.

### g. NATO Infrastructure and U.S. Military Construction (MILCON) Programs for Europe

The NATO Infrastructure Program provides cost-sharing for programming and building military facilities for wartime operational use of NATO Commands' forces. Included are facilities for

NATO's common use, joint use by forces of two or more countries, or, in some cases, for sole use of one country's NATO-committed forces when this is considered to be of common NATO interest. For example, Infrastructure financing is provided for U.S. user airfields in Europe where one or more squadrons of NATO-committed aircraft are stationed or are committed to specific times for deployment. This also applies to additional facilities for U.S. reinforcement squadrons that are to be collocated on airfields that are primarily for host country or other NATO country forces. We have recently reached agreement with Turkey to establish such collocated operating bases in that country.

In addition, the recently approved Reinforcement Support Category (RSC) of Infrastructure provides for prepositioning facilities for combat-ready storage of equipment and materiel for external reinforcement forces. It also includes storage of replacement equipment and ammunition for committed forces and facilities for supporting their arrival and forward deployment. Congressional support for U.S. materiel prepositioning actions is essential. Last year's denial of authority to proceed with prepositioning the equipment for two additional reinforcing divisions (POMCUS 5 and 6) has seriously undermined substantial Allied contributions to the project as well as our ability to meet the commitment to provide a 10 division D-Day force. We are seeking to remedy this situation in our Supplemental Appropriation request for FY 1983.

There is a continuing backlog of unprogrammed military facilities needed by U.S. forces in Europe involving both national (MILCON) funding (e.g., barracks) and NATO Infrastructure funding (wartime operational facilities) in support of NATO missions. This backlog has negative implications for the readiness of U.S. forces.

Thirteen NATO nations currently contribute to cost-sharing NATO Infrastructure projects. The number rises to fourteen when France participates, but this is largely in the air defense warning installations category. In due course, it is anticipated that Spain, as a new member of NATO, will participate in the Infrastructure Program.

National commitments, which are based on long-established cost-shares, are made in progressive steps. These steps include agreement to a multiyear (usually five) ceiling, a yearly program of specific projects called a Slice, and the actual authorization of NATO funds for individual projects.

The U.S. benefits from the Infrastructure Program. While the U.S. share of the cost is 27% (for which $300 million is programmed in FY 1984), approximately 35-40% of the projects programmed annually directly support U.S. NATO-assigned forces. These projects include a wide range of facilities at airfields, naval bases, and missile sites as well as storage facilities for prepositioned war reserve materiel, special weapons, and fuel.

In view of the common financial commitments involved, all decisions on Infrastructure, in all of the various NATO committees at all levels, must be unanimous. Accordingly, each participating country has an equal voice in agreeing to an Infrastructure program, or to funding a given project, with full awareness that others have the same prerogative. There is a recognized need for give-and-take that normally results in timely resolution of most problems.

The NATO Infrastructure Program funds only wartime operational facilities. Over the years, the Allies have agreed that personnel support and other predominantly peacetime projects will be funded nationally. Therefore, $1.1 billion in MILCON funding is required for Europe in FY 1984, with the primary emphasis on the improvement of living and working conditions for our deployed forces.

In recent years, we have taken steps to integrate planning and budgeting for Infrastructure and related U.S. national construction programs. We have focused upon:

-- Establishing U.S. and NATO priorities,

-- Determining and justifying funding sources,

-- Phasing coordination between Infrastructure and U.S. funding for facilities not eligible for NATO,

-- Giving advance notice of U.S. priorities to host countries having mixed U.S.- and Infrastructure-funded projects, and

-- Recouping U.S. funds from projects previously prefinanced by the U.S.

In addition, we are currently supporting a NATO-wide effort to cause closer coordination between Infrastructure financing requirements and the various NATO policy decisions establishing the missions, programs, and force goals that create the need for common-funded facilities.

The rate of Infrastructure programming has increased sharply in recent years, and the program ceiling agreed for the current five years (1980-84) is not adequate. Considering that there are unfulfilled priority needs far beyond that agreed level, the U.S. is actively supporting a request from Major NATO Commanders (the Supreme Allied Commander, Europe and the Supreme Allied Commander, Atlantic) for a substantial increase by or before May 1983.

NATO recently succeeded in accelerating the completion of Infrastructure projects. However, this success has caused budgetary problems for many nations in meeting the accelerated payments involved. We expect these problems to be resolved in a forthcoming review of the current Infrastructure ceiling.

### h. Host Nation Support

Host nation support has become a primary element in NATO efforts to achieve a stronger deterrent and warfighting posture. We and our Allies have undertaken extensive planning to improve the effectiveness and capabilities of U.S. in-place and reinforcing forces through the use of wartime host nation support. This will ensure critical logistics support without further straining U.S. lift and support resources.

Since host nation support is essential to our ability to reinforce Europe rapidly in a crisis, we have asked our Allies to provide the maximum amount of support.[1] This includes support of U.S. reinforcements and facilitating follow-on resupply originating in the United States and moving through European seaports and airports to forward locations in Central Europe. It also includes the movement of ammunition and supplies from central storage locations to positions of intended use.

We are making significant progress in developing and expanding wartime host nation support arrangements with Germany, Belgium, the Netherlands, Luxembourg, and the United Kingdom. We have also negotiated host nation support agreements with most of the NATO Northern region nations and we hope to complete negotiations for such agreements with Southern region nations. Our most important achievement has been a unique host nation support agreement signed with Germany last year. The German government has agreed to organize in peacetime reserve units that during crisis or war would be dedicated to providing logistics support to U.S. reinforcing forces and forward-deployed combat units in Germany. These new German units will comprise about 93,000 German reservists. The agreement also formalizes the intention of the Germans to provide extensive support from their civil sector during crisis and war.

Our wartime host nation support agreements are an extension of peacetime economic burdensharing into a logical division of labor among Allies that provides maximum benefits from NATO defense resources. For instance, we estimate that the 93,000 German reservists will cost about one-tenth of what it would cost to provide that same capability with U.S. Reserve Component units and less than one-fortieth of what it would cost to provide that capability with U.S. active forces. Neither of these cost comparisons considers the cost of any additional strategic airlift capability that would be needed to move U.S. combat service support units -- active or reserve -- from the U.S. to Europe in an emergency. If the costs of additional airlift are considered, the cost advantage of the host nation support solution over additional U.S. force structure becomes greater than 200 to 1 on a 20-year life cycle basis.

In this context, Congress' failure to authorize funding for the U.S. FY 1983 share of this eminently desirable arrangement dealt a severe blow to our progress in obtaining increased burdensharing by our Allies. I hope that Congress will correct this unfortunate situation in acting upon our FY 1983 Supplemental Appropriation request. Host nation support makes sense for both the U.S. and the Alliance. We intend to continue vigorous support of this important program, not only in Europe but in all parts of the world where U.S. forces may have to be deployed.

### i. NATO Arms Cooperation

NATO efforts to improve cooperation among its members in research, development, and production of armaments and equipment range from bilateral to Alliance-wide measures. The Conference of National Armaments Directors (CNAD) directs this activity. Supporting bodies include three main armaments groups (Army, Navy, and Air Force), a Defense Research Group, a NATO Industrial Advisory Group, the Tri-Service Group on Electronic Equipment, and a newly formed Working Group on NATO Acquisition Practices. NATO work in this field takes the form of project groups, bringing together interested countries in development of specific equipment, and information exchange groups. In many cases the decision to form project groups results from discussion in an information exchange group.

The U.S. furnishes representatives to almost all of these armaments groups and subgroups, with the Under Secretary of

Defense for Research and Engineering serving as the U.S. member of the CNAD.

Recent U.S. initiatives in NATO armaments cooperation have included emphasis on memoranda of understanding (MOUs), encouragement of co-production, and organization of research under families of weapons. Bilateral or multilateral MOUs may deal with specific projects for co-development and co-production; in addition, bilateral general reciprocal procurement MOUs have been negotiated to open competition in systems acquisition through waiver of buy national provisions. In this regard, Congressional restrictions related to procurement of items containing foreign specialty metals adversely affect cooperative defense programs with our NATO Allies and other friendly countries. Such restrictions also harm our own defense industry by reducing opportunities for the offsetting arrangements normally associated with large arms purchases from the U.S. Without offsets from the U.S., our Allies may well look to other sources for meeting their defense equipment needs. So, quite apart from the impact on NATO cooperation *per se*, our own self-interest dictates that Congress provide prompt relief from these restrictions. We have included the necessary changes for such relief in our FY 1983 Supplemental Appropriation request.

The U.S. and its Allies in NATO devote considerable effort to the task of cooperation in armaments. Nevertheless, we still need to draw even greater benefits from the opportunities that exist or can be created, so that we can capitalize on the technological advantages and combined superiority of the industrial base of the U.S. and its Allies. In pursuit of this goal, Under Secretary DeLauer recently asked the Defense Science Board (DSB) to establish a special task force to investigate policies and problems that impede international industry-to-industry cooperation in the Alliance. Their work to date has been most valuable. Armaments cooperation remains a field of priority importance.

### j. NATO Logistics

Military logisticians insist, correctly, that the initial readiness of forces in the field, our ability to reinforce them, and the sustainability of the fully mobilized forces all depend in great part on prior logistics arrangements and a continuing logistics support system.

While logistics has for years been considered in NATO as a national responsibility, NATO has begun to recognize that logistics cooperation and commonly undertaken efforts were necessary for effective coalition defense within available resource levels. Accordingly, NATO recently established a Senior NATO Logisticians Conference (SNLC) (SNLC) which, among its other responsibilities, is concerned with improving NATO logistics arrangements and readiness.

The SNLC injects a coalition perspective into Alliance logistics considerations. Its program of NATO logistics improvements includes greater emphasis on broad logistics planning for the Alliance, harmonization of national arrangements in the communications zones, logistics sustainability, host nation support, improved medical support support capabilities, and improvement of the logistics posture of the Southern region.

We provide strong support for this essential program. The Assistant Secretary of Defense (Manpower, Reserve Affairs, and

Logistics) and the Director, J-4 (Logistics) of the Joint Staff, serve respectively as the U.S. civil and military representatives on the SNLC. Its work has helped us make progress toward a better integration of U.S. forces and their logistic support into the overall NATO framework.

### k. NATO Exercises

The overall aim of NATO military exercises is to improve the capability of NATO and national forces, headquarters, and agencies to implement NATO contingency and General Defense Plans, all of which require close cooperation among forces of different nationalities. The plans also require the integration of reservists and reserve units with regulars and standing units.

We are active participants in the NATO exercise program. Over two-thirds of the JCS exercise program consists of either NATO scheduled and sponsored exercises or NATO-related exercises sponsored by a NATO member nation in coordination with the Supreme Allied Commander, Europe (SACEUR). Program emphasis is placed on rapid reinforcement of ACE and initial combat capabilities based on the NATO strategy of forward defense. For example, we allocate over half the airlift capability for JCS exercises to rapid reinforcement exercises such as REFORGER and CRESTED CAP held each year in Europe.

In response to our recommendation, NATO has agreed to exercise its procedures for response to warning, including ambiguous warning, in its annual NATO Headquarters exercise.

### l. NATO Training

Each member nation is responsible for training the forces it commits to NATO. However, the Major NATO Commanders are concerned with the higher levels of training involving the ability of national forces to work together under NATO Headquarters, as well as their effectiveness and readiness. This higher training takes the form of international or NATO exercises and maneuvers. The Standing Naval Force Atlantic and the Standing Naval Force Channel, into which maritime units of member countries rotate periodically, serve as training testbeds for maritime interoperability and cooperation.

In addition to higher level or coalition training, NATO also assists countries in meeting individual training needs in a number of ways. NATO schools run by the NATO Military Authorities offer courses on nuclear and conventional weapons planning and employment; NBC defense; electronic warfare; and communications, command, and control. NATO nations also offer many courses to both NATO personnel and personnel from other member nations. The Euro NATO Training Group, with 12 NATO nations participating, develops cooperative training projects in which allied personnel train together in a common course of instruction, using common tactics and procedures. This consolidated training is usually less expensive because of economies of scale. Examples of these projects are joint jet pilot and helicopter pilot training (conducted in the U.S.) and training in Europe on air-ground operations, engineer operations, and logistics planning. Congressional action to permit the U.S. to reciprocate the Allied practice of providing training to U.S. personnel at incremental cost would enable NATO to realize more fully the benefits of cooperative training. Finally, the NATO Defense College in Rome, which operates under the general supervision of the NATO Military Committee, instructs mid-level military and civilian officials of NATO governments at the level of a senior defense college, emphasizing coalition problems.

### m. Mutual and Balanced Force Reductions (MBFR) and Arms Control

While the NATO Allies are deeply involved through close consultations in all important arms control talks, such as the Soviet-U.S. bilateral negotiations at the START and INF talks, those Allies who participate in the MBFR talks with the Warsaw Pact act as a collective body. As a complement to NATO conventional force improvement programs, the MBFR talks are aimed at improving stability through significant and verifiable reduction of the conventional forces of both sides to parity in Central Europe.

The Warsaw Pact superiority in military ground forces is one of the most destabilizing factors in the European military equation. The U.S. and its NATO Allies are committed to addressing this problem through their military programs. However, the Alliance is equally committed to reducing levels of direct military confrontation in peacetime.

The MBFR talks are unique in that all positions to be taken by the NATO negotiators in Vienna are discussed in the NATO Senior Political Committee and approved by the North Atlantic Council. Furthermore, the 12 NATO members who participate as direct participants or participants with special status in the talks themselves develop negotiating tactics based on full consensus. Department of Defense personnel play a major role in the development of U.S. positions for use in NATO consultations. My senior advisors and I watch this process closely.

### n. Burdensharing

There is no formal NATO program aimed solely at burdensharing. In a fundamental sense, the Alliance itself is a mechanism for sharing the burden of facing up to Soviet military power. Decisions as to national roles within the Alliance are sovereign decisions. Nevertheless, concepts of cooperative effort and fair sharing are implicit in every major Alliance decision.

We deal specifically with burdensharing, of course, when NATO sets force goals. We comment on the quality of burdensharing when NATO reviews national force and financial plans. Once having politically agreed on national shares, as in the Infrastructure Program, the NATO Civil Budget, and the International Military Headquarters and Agencies Budget, we find it difficult to readjust these shares.

The essential aim of burdensharing in NATO defense is that each member nation carry its full share, according to its political and economic capabilities. U.S. officials dealing with NATO matters understand fully the importance of full participation by all Alliance members and work to this end. Over the long run we must all do more if we are to counter effectively the Soviet threat.

A separate report on this subject is being submitted to the Congress in accordance with PL 97-252.

o. Master Restationing Plan

The Army has a plan for relocating three brigades in Germany to U.S.-controlled land close to the eastern border of the Federal Republic of Germany. This plan, called the Master Restationing Plan, or MRP, is not a NATO program, but is an important part of our effort to strengthen the defense of Europe. The MRP supports force modernization, increased deterrence, and war-fighting capabilities, and would improve living and working conditions for American soldiers and their families.

In March 1982, senior-level delegations from the U.S. and Germany met to discuss the mutual benefits inherent in the MRP. As a result of this meeting, a working group was tasked to identify problems that could result from implementing the MRP. They reached agreement on the technical and administrative aspects of the plan, but not on how the plan is to be funded.

During 1983, we will continue to hold MRP discussions with the Germans aimed at developing cost-sharing plans acceptable to both countries.

p. Cost of Withdrawing U.S. Forces From Europe

(1) Background

During its hearings on the FY 1983 DoD budget, the Congress expressed continued interest in the costs associated with our NATO deployments. In responding to similar requests in the past, DoD has derived its cost estimates by "allocating" the total defense budget to various regions of the world. This approach has several serious shortcomings, however. The two most obvious are:

(a) U.S. forces are multipurpose. While U.S. forces forces are available to meet any aggression in Europe by the Soviet Union and its allies, they must also be able to respond to threats against U.S. security interests in other regions of the world. Thus, even if our NATO commitment were suddenly to disappear, we would not necessarily be able to inactivate a significant portion of the forces now stationed in Europe, much less those in CONUS whose current primary mission is rapid deployment to Europe.

(b) Much of our force structure that could not be directly allocated to Europe under any defensible methodology nevertheless supports common allied interests. An example is our strategic nuclear forces.

Although Congressional inquiries concerning the costs of our NATO deployments have been phrased in a variety of ways, it seems clear that they are based on a notion that budgetary savings could be achieved by withdrawing some of our forces from Europe. This notion cannot be explored using an allocation approach and, quite frankly, it should not be considered seriously without reference to the political and military implications discussed below and to existing agreements among the Allies. It requires an analysis that establishes a precise scenario for redeploying forces from Europe to CONUS and identifies the costs or savings associated with each of the major elements of that scenario. We have conducted such an analysis and believe the results are quite interesting.

### (2) Political and Military Implications of U.S. Troop Withdrawals

Before presenting the analysis, I feel it is important to reiterate some basic tenets related to forward deployment, a key supporting policy of our defense strategy.

U.S. forces are maintained in Europe directly in support of U.S. political and military interests -- not as an act of charity toward our Allies. Our force presence is an integral part of our NATO defense commitment, and withdrawals of the scale discussed in the following analysis would weaken our credibility both with our Allies and with potential adversaries. Our presence helps foster deterrence by demonstrating U.S. resolve.

The adequacy of NATO's conventional defenses, particularly in the Central Region, in effect determines the threshold for nuclear war. A strong conventional defense raises the threshold; a weak defense lowers it. Recognizing that strong conventional defenses reduce the likelihood of war, whether conventional or nuclear, in Western Europe, the United States and its Allies have taken measures to bolster their defenses.

At the Bonn Summit meeting in June 1982, President Reagan reaffirmed the United States' commitment to the NATO Alliance. He underscored emphatically our adherence to the principle that the security of all Allies is indivisible and stated that there will be no unilateral withdrawal of the American presence in Europe.

### (3) Illustrative Scenarios

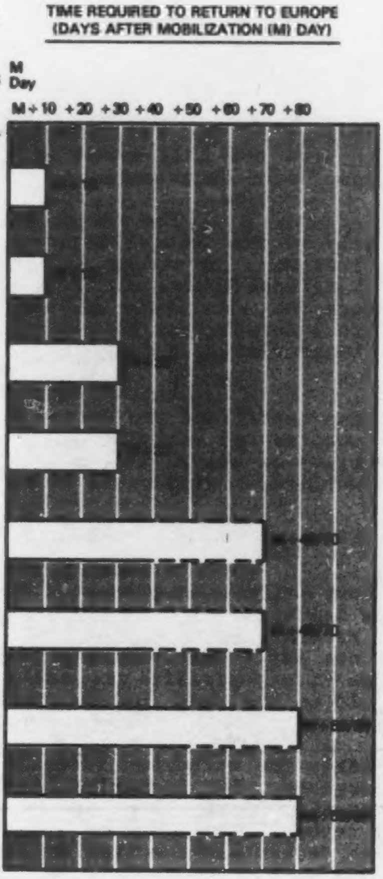
A summary of the illustrative scenarios evaluated in our analysis is presented in Chart III.D.1. Major variables include the number and type of forces withdrawn; whether or not the equipment of returning Army forces would be prepositioned in Europe; whether or not additional mobility forces would be procured and, if so, the type (i.e., airlift vs. sealift); and whether the withdrawn forces would be retained in the active force or placed in the reserves.

The scenarios are listed generally in order of how quickly the withdrawn forces would be able to return to Europe in an emergency. For Scenarios 1A, 1B, 2A, and 2B, the return time was an "input" assumption -- that is, we specified that the forces were to return by M+10 (Scenarios 1A, 1B) or M+30 (Scenarios 2A, 2B) and then determined the type and amount of mobility forces that would be needed to meet those objectives. For the remaining scenarios, which entail neither prepositioning nor additional lift, return time is largely a function of lift availability and unit readiness. For Scenarios 3A and 3B the units could deploy more quickly than indicated in Chart III.D.1 if they were given high priority on the time-phased deployment list, but this would delay the deployment of other combat forces. Because of this "ripple" effect, the net impact in terms of the total number of combat forces arriving in the theater over time would be the same as if the withdrawn units had awaited their turn for the first available lift.

## Chart III.D.1

## SUMMARY OF SCENARIOS

| Scenario | Forces Withdrawn from Europe | Prepositioned Army Equipment in Europe | Additional Lift | Status in CONUS Active/ Reserve |
|---|---|---|---|---|
| 1A | 1 Army Division<br>1 Tac Air Wing | Yes | Airlift | Active |
| 1B | 1 Army Corps<br>2 Tac Air Wings | Yes | Airlift | Active |
| 2A | 1 Army Division<br>1 Tac Air Wing | No | Sealift | Active |
| 2B | 1 Army Corps<br>2 Tac Air Wings | No | Sealift | Active |
| 3A | 1 Army Division<br>1 Tac Air Wing | No | None | Active |
| 3B | 1 Army Corps<br>2 Tac Air Wings | No | None | Active |
| 4A | 1 Army Division<br>1 Tac Air Wing | No | None | Reserve |
| 4B | 1 Army Corps<br>2 Tac Air Wings | No | None | Reserve |



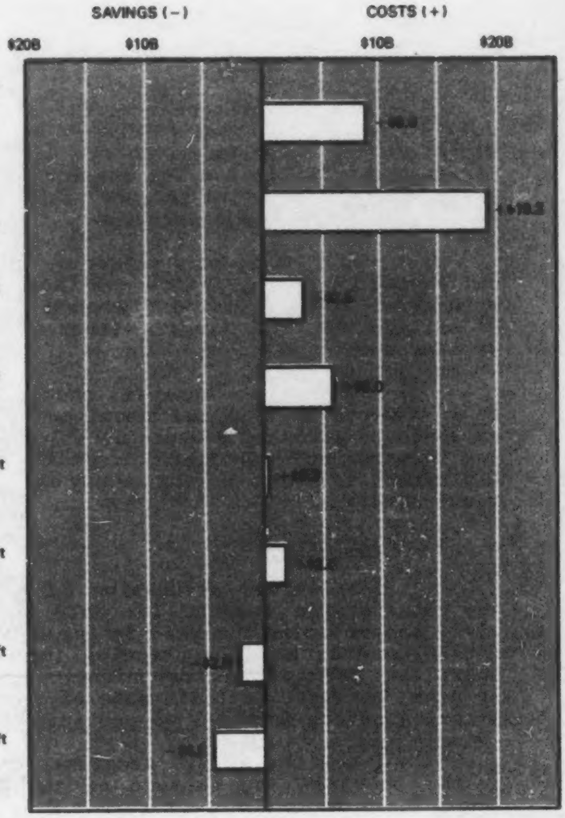
**Note:**

In Addition to the Major Combat Unit Withdrawals Indicated Here, the Air Force Has Included in Its Cost Analysis Other Associated Actions It Would Take Under the Scenarios Addressed in This Analysis. These Include, Among Other Things, a Variety of European Base Closures and Consolidations.

Chart III.D.2

## SUMMARY OF 5 YEAR (1948-88) SAVINGS / COST (FYDP $ IN BILLIONS)

| Scenario | Forces Withdrawn | Scenario Description |
|---|---|---|
| 1A | 1 Division<br>1 Wing | POMCUS<br>Additional Airlift<br>Active, M + 10 |
| 1B | 1 Corps<br>2 Wings | POMCUS<br>Additional Airlift<br>Active, M + 10 |
| 2A | 1 Division<br>1 Wing | Additional Sealift<br>Active, M + 30 |
| 2B | 1 Corps<br>2 Wings | Additional Sealift<br>Active, M + 30 |
| 3A | 1 Division<br>1 Wing | No Additional Lift<br>Active<br>M + 40/70 |
| 3B | 1 Corps<br>2 Wings | No Additional Lift<br>Active<br>M + 40/70 |
| 4A | 1 Division<br>1 Wing | No Additional Lift<br>Reserve<br>M + 50/80 |
| 4B | 1 Corps<br>2 Wings | No Additional Lift<br>Reserve<br>M + 50/80 |



### (4) Cost Impact of Troop Withdrawals

Chart III.D.2 depicts the total FY 1984-88 costs/savings associated with each scenario.

The telling point is that all of the scenarios calling for a rapid return of the forces in an emergency would require substantial net increases in TOA during FY 1984-88. These added costs could range from approximately $3 billion to $19 billion, depending on the size of the withdrawal and how rapidly the forces were to return (M+10 vs. M+30).

The scenarios that would retain the forces on active duty without additional POMCUS or mobility forces (and therefore of significantly lower value to the Alliance) would also result in net increases -- $2 billion for the larger withdrawal (the "B" scenarios) and around $300 million for the smaller one (the "A" scenarios) during the five-year period considered.

The only scenarios that would generate a net savings during the five-year period are those that would reduce active force structure. The estimated five-year savings range from approximately $4 billion for the larger withdrawal to about $2 billion for the smaller one.

This analysis should put to rest the notion that we could somehow fulfill our commitment to our NATO Allies or maintain an adequate security posture at a lower cost to ourselves by withdrawing forward-deployed forces from Europe. On the contrary, forward deployment is a cost-effective way of meeting those collective security requirements.

### 3. Conclusion

This limited discussion of NATO programs does not reflect the considerable support for NATO defense being developed from the civil sector under the NATO Senior Civil Emergency Planning Committee (SCEPC) or the major continuing improvement of NATO communications under the NATO Joint Communications-Electronics Committee (NJCEC). It does, however, indicate some of the dimensions of the NATO defense planning effort in which we participate.

I see these NATO programs, in their totality, as essential to the best use and support of the forces that nations, including the U.S., make available for NATO defense. Along with my NATO Ministerial colleagues, I participate in twice-yearly Ministerial reviews of NATO defense programs in the Ministerial Meetings of the Defense Planning Committee. We try to keep momentum in the NATO defense programs and to keep them in some balance. The NATO programs are a necessary complement to national defense programs; the two efforts taken together will determine the continuing effectiveness of NATO deterrence and defense.

## E. RAPID DEPLOYMENT FORCES

### 1. Introduction

The capability to deploy combat forces rapidly is essential to our ability to deter war and, if necessary, to fight -- in Europe, Southwest Asia (SWA), the Pacific, or elsewhere -- especially in the important early days of a conflict. This helps us meet our key objective of terminating hostilities at the lowest possible level of violence. Our FY 1984-88 programs recognize the important elements of speed and flexibility for U.S. forces, and they are structured to alleviate shortfalls resulting, at least in part, from our concentration on the defense of Western Europe in the 1970s.

Our current programming for rapid deployment forces focuses primarily on SWA for two reasons:

- The stability and security of the region are vital to our national security interests, and to those of our friends and allies; and
- Since potential SWA contingencies encompass a wide range of demanding situations, programming for that theater provides us a robust capability that covers likely demands in other theaters as well.

Although we are making modest increases in the overall size of our tactical air and naval forces, the primary focus of our rapid deployment programs is on enhancing the readiness of our existing forces for distant deployment and providing additional training, mobility, and support for them. In some cases, we are reorienting unit responsibilities away from a single-theater mission and toward a rapid-response posture for multiple contingencies. Of course, as with any theater, SWA poses some special problems requiring us to develop unique solutions. In general, however, the majority of our rapid deployment programs enhance our overall combat capability, even though they may originally have been developed primarily for SWA. Consequently, our programs for SWA should be viewed as an integral portion of a larger effort aimed at revitalizing our overall worldwide rapid-response capability.

#### a. Potential Conflicts Requiring Rapid Deployment Forces

In general terms, we need a "rapid deployment capability" primarily for those areas of the world in which the U.S. has little or no nearby military infrastructure or, in some cases, maintains no presence at all. There are many locations where we might need to project force, not only in SWA and the Middle East, but also in Africa, Central America, South America, the Caribbean, and elsewhere.

Each of these areas has special requirements, but it would be too costly to try to tailor a unique force for each. Therefore, we must set priorities -- as we have with our programs for SWA -- and, at the same time, build flexible capabilities that can serve our needs in more than one region. If faced with a crisis requiring military force, we will probably send our most ready, deployable units, even if they are designed primarily for other commitments.

SWA and the Middle East, as depicted in Chart III.E.1., understandably represent the focus of our current rapid deployment force planning and programming.

(1) Southwest Asia (SWA)

It is our policy to support the independence and territorial integrity of the countries in this politically unstable region, and to prevent a further spread of Soviet domination. Furthermore, one-third of the free world's oil supply is produced in SWA, making it vital to the interests of the U.S. and especially to those of our allies.

Although SWA is the focus of our rapid deployment planning, we presently have no agreements to station our combat forces ashore in the area and, therefore, maintain only a limited sea-based presence there. Furthermore, political conditions and agreements with our friends and allies near the region, in Europe, and elsewhere along vital lines of communication (LOCs) influence the availability of important resources and transit facilities necessary to support our rapid deployment strategy. As a result, many of our programs emphasize mobility and achieving access to countries en route to and near that distant region.

The continuing Soviet occupation of Afghanistan, the Iran-Iraq war, and lower-level intraregional disputes, such as those between North and South Yemen, exemplify the range of regional instabilities that complicate our policy and strategy. Our programs for the region must therefore offer capabilities across a spectrum of potential conflicts.

Regional internal instabilities and intraregional conflicts provide frequent opportunities for Soviet intervention through proxy states or Soviet-backed sympathizers. In most cases, we would respond indirectly through economic, technical, political, or security assistance programs, depending on political conditions. U.S. military participation could range from the provision of training, materiel, and security assistance to support for the employment of third-party assistance or the tailored use of military force, as appropriate.

An overt Soviet invasion would, of course, represent a far more demanding requirement for a military response. Such an invasion could lead to the establishment of Soviet control in vital areas if the U.S., together with our allies and regional friends, were unprepared to respond rapidly with sufficient force.

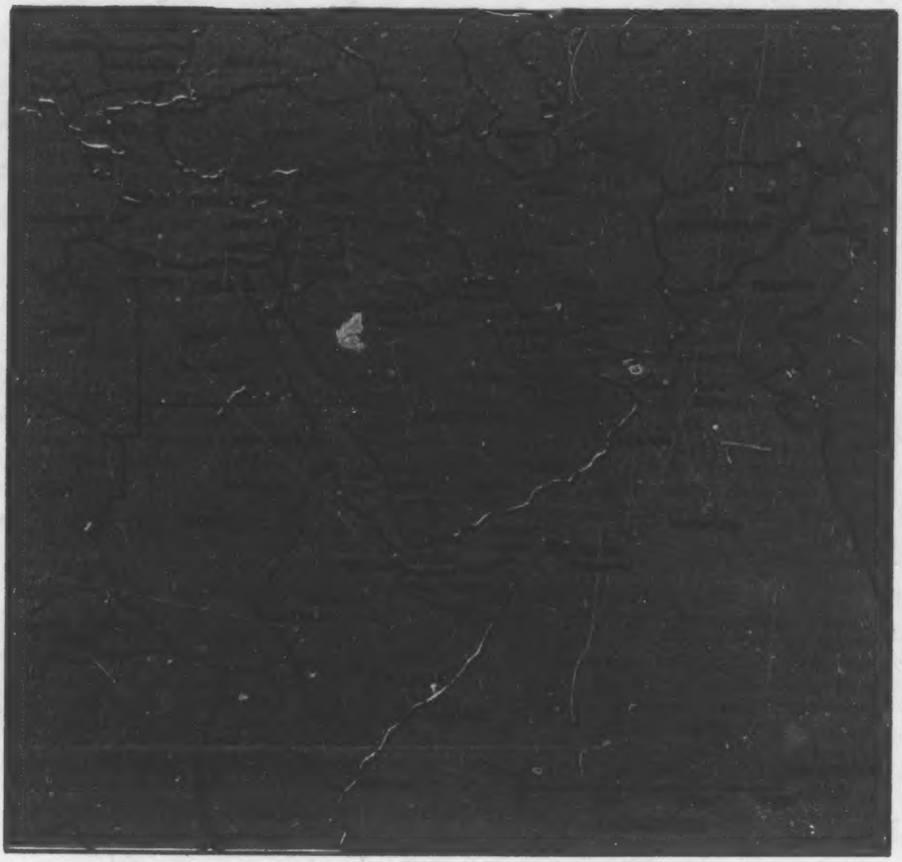
(2) Middle East

The Middle East is contiguous to, and by some definitions overlaps, SWA. This, too, is a politically dynamic region that poses many similar problems for U.S. forces and, therefore, requires the same general types of capabilities that we are building for SWA.

Indeed, during the recent crisis in Lebanon, we deployed elements of our rapid deployment forces (a Marine Amphibious Unit) as part of a multinational peacekeeping force.

Chart III.E.1

## SOUTHWEST ASIA AND THE MIDDLE EAST



### b. Unified Command for SWA

On 1 October 1981, we chartered the Rapid Deployment Joint Task Force (RDJTF) as a separate joint task force reporting directly to the National Command Authority (NCA) through the Joint Chiefs of Staff (JCS). Its commander was given operational control over selected Army and Air Force units and was assigned operational planning responsibility for SWA. This narrowed scope reflected our recognition of the need for a full-time major commander to develop detailed plans for the wide range of possible contingencies in that region. The new structure allowed the RDJTF Commander to plan his operations more effectively, exercise his forces, and maximize their combat readiness.

On 1 January 1983, we upgraded the RDJTF to a Unified Command for SWA, after a time-phased transition we had been planning for over a year. This marks the first geographic unified command created in over 35 years, and highlights the importance we have placed on SWA and our ability to deter or oppose Soviet aggression in the region.

With this transition, the Commander, RDJTF became the Commander-in-Chief, United States Central Command (CINCCENT). The same forces formerly available to the RDJTF are available on a priority basis for CINCCENT planning, exercises, and operations as necessary. Further, CINCCENT continues to have access to a reservoir of additional forces he could draw upon, depending upon the size and nature of the contingency. While, in principle, most of our general purpose forces are in some sense available for rapid-response missions, the actual composition of the available-forces reservoir will change and gradually expand over time, as our ability to deploy forces rapidly and support them adequately improves. Table III.E.1. depicts, in generic terms, the major types of combat forces available for SWA and other rapid deployment contingencies.

The primary mission of the new command is to deter Soviet aggression and to protect U.S. interests in SWA. For deterrence to be credible, we must be prepared to fight, thereby raising the cost of Soviet aggression to an unacceptable level. Our analysis indicates that a joint task force, with appropriate air, naval, and unconventional warfare support, would have a substantial capability against a Soviet invasion or lesser threats in SWA. We are examining ways to increase our SWA mobility capabilities. This will require a commensurate increase in funding for readiness and sustainability, as well as improved planning and strategic lift, advantageous use of strategic warning, and prepositioning of supplies and equipment in the region.

The new command is based at MacDill Air Force Base, Florida. The feasibility of locating the headquarters in the SWA region is presently under study.

Over the next year or so, we plan for CINCCENT's responsibilities to grow as the command assumes more of the functions typically assigned to a CINC (e.g., administration of security assistance programs). We are in the process of manning the headquarters staff, primarily from existing personnel authorizations.

Due to his need for a core of rapidly deployable combat forces, CINCCENT has been given access to some of our most mobile and ready units. Many of these units, however, may be needed for crises outside CINCCENT's geographical area of responsibility. Therefore, as needed, we will make them available for rapid deployment missions in other regions.

TABLE III.E.1.

Combat Forces for Rapid Deployment Contingencies

| | FY 1984 |
|---|---|
| Army | |
| Airborne Divisions | 1 |
| Air Mobile/Air Assault Divisions | 1 |
| Mechanized Infantry Divisions | 1 |
| High Technology Infantry Divisions | - |
| Cavalry Brigade Air Combat | 1 |
| Rangers and Unconventional Warfare Units | Varies |
| Marine Corps | |
| Marine Amphibious Forces 1/ | 1-1/3 |
| Air Force | |
| Tactical Fighter Wings (TFWs) 2/ | 7 |
| Strategic Bomber Squadrons 3/ | 2 |
| Navy | |
| Carrier Battle Groups | 3 |
| Surface Action Groups | 1 |
| Maritime Patrol Air Squadrons | 5 |
| Headquarters | |
| Army Headquarters | 1 |
| Naval Forces | 1 |
| Air Forces | 1 |

---

1/ A Marine Amphibious Force typically consists of a reinforced Marine division and a Marine aircraft wing (containing roughly twice as many tactical fighter aircraft as an Air Force tactical fighter wing).

2/ Includes support forces.

3/ These bombers and associated reconnaissance, command and control, and refueling aircraft make up the Air Force's Strategic Projection Force.

### c. Rapid Deployment Force Issues -- The SWA Mission

No matter where outside NATO we might send our rapid deployment forces, the problems they face are likely to be quite different from those posed by a NATO/Warsaw Pact contingency. In general, our forces are likely to have to operate in distant theaters characterized by little regional U.S. presence, an inadequate infrastructure (i.e., limited road, rail, air transport, communications, or similar facilities), and a harsh climate or difficult terrain. Requirements for SWA are a prime example of the types of considerations we must incorporate into our rapid deployment strategy and programs.

(1) Mobility

Our peacetime regional presence in SWA is limited primarily to a sea-based force. Therefore, we must be able to project additional forces very rapidly into this distant region and adequately sustain them in combat. Meeting these objectives will require:

-- Developing mobility capabilities to deploy forces rapidly to and within SWA over extended air and sea lines of communication (ALOCs/SLOCs) and to sustain them in combat;

-- Locating, obtaining approval for, and developing land-based prepositioning sites;

-- Obtaining both overflight rights and en route access from several additional countries;

-- Securing lengthy ALOCs/SLOCs during the conflict to sustain combat operations;

-- Obtaining access to and improving in-theater airfields and seaports;

-- Obtaining host nation support agreements with countries en route to and in SWA; and

-- Improving our cargo loading and unloading capabilities to compensate for the lack of local infrastructure and trained personnel.

(2) Force Structure and Readiness

The different types of rapid deployment scenarios require different types and sizes of forces and, depending upon the situation, different force capabilities. Regardless of their size, configuration, or destination, our rapid deployment forces must be prepared to deploy on a "moment's notice." Our primary concerns are that:

-- Our forces be "streamlined" to maximize combat power early in a crisis by ensuring our units include only time-sensitive equipment and per sonnel;

-- The equipment to be moved be appropriate to the climate and terrain of the region;

-- The limited capacity of our mobility systems be used efficiently; and

-- Steps be taken to ensure our deploying forces are "rapid" (by improving their equipment and personnel preparedness as well as planning) and "ready" (by training combat and logistics support units for operations in unfamiliar and widely varying climates and terrain).

### (3) Support

Because of the characteristics of the rapid-response scenario in general -- and deployment requirements for SWA in particular -- our support forces are faced with:

-- Little or no host nation support, requiring them to be able to operate independently;

-- A need for access to en route and regional facilities, in peacetime as well as during crises;

-- A need to tailor support (e.g., water, medical, communications, and transportation) for unique and austere combat operations; and

-- A requirement for "cross-service" support (e.g., Army long-distance land transportation for Marine and Air Force units).

In addition to these challenges, three particular problems still confront our rapid deployment forces:

-- Many of our combat and support forces identified for rapid deployment are "dual-" or even "triple-hatted" (i.e., have missions in other theaters).

-- Because our forces have been designed primarily for use in Europe, several types of support units -- essential in the austere environment of SWA -- are in short supply or do not exist. To help remedy these deficiencies, the Army plans to create some combat service support units specifcally for SWA, but these will not become operational until late in the program period.

-- Were roughly simultaneous crises to occur in NATO and SWA, or elsewhere, our airlift and fast sealift could not deploy forces to both theaters as rapidly as might be necessary.

Our FY 1984-88 program addresses each of these requirements. Our principal program goals can be summarized as follows:

-- To improve our mobility forces and preposition sufficient equipment and supplies in order to deploy rapidly and support a force of an appropriate size to deter Soviet aggression;

-- To provide long-term support and resupply to sustain these forces;

-- To gain access to and improve regional facilities and to expand local support structures;

-- To strengthen friendly forces in the region and carry out joint and combined exercises and planning; and

-- To increase our capability to deploy to and fight in two or more theaters simultaneously.

## 2. FY 1984-88 Programs

Planning and programming to improve our rapid-response capabilities have improved significantly over the last three years, as has our ability to project forces overseas, especially in SWA. Our FY 1984-88 programs continue this trend, enhancing the capability of our rapid deployment forces and reinforcing the credibility of our intentions.

Cost Summary. At the start of this chapter, I stated that our programs for SWA should be viewed as an integral portion of a larger effort aimed at revitalizing our overall worldwide rapid-response capability. Nevertheless, it is useful to distinguish SWA-unique costs from the costs of programs that enhance our rapid deployment capability in general. We can group our FY 1984-88 program costs into two categories:

-- SWA-Specific Programs -- those few programs that would probably not be needed if our national strategy did not require maintaining rapid deployment capabilities specifically for SWA; and

-- Other Rapid Deployment Programs -- those programs that, although they may have been developed primarily to support our SWA strategy, would be needed to support missions and operations in other regions. These programs would still be needed even if we removed SWA planning from our national strategy.

The FY 1984-88 costs for these programs are summarized in Table III.E.2.

TABLE III.E.2.

Rapid Deployment-Related Program Costs
($ Millions)

| | FY 1984 | FY 1985 | FY 1986 | FY 1987 | FY 1988 | FY 1984-88 |
|---|---|---|---|---|---|---|
| SWA-Specific | 622 | 805 | 893 | 1,204 | 852 | 4,376 |
| Other | 1,618 | 1,479 | 1,580 | 1,717 | 2,783 | 9,177 |
| | 2,240 | 2,284 | 2,473 | 2,921 | 3,635 | 13,553 |

### a. Combat Forces for Rapid Deployment Contingency Planning

Over the next five years, our forces available for rapid deployment contingency planning will grow. In FY 1984, 3-1/3 Army divisions, plus their combat service support, and 1-1/3 Marine Amphibious Forces will give us a fully supported rapid deployment capability of about 4-2/3 division equivalents (see Table III.E.1). The Army divisions, however, are expected to continue to be dual-hatted with NATO.

We have programmed about seven Air Force tactical fighter wings for our rapid deployment forces in FY 1984. Like our ground forces, these tactical fighter wings will be dual-hatted with NATO.

The Navy will continue to make available to our rapid deployment forces up to three carrier battle groups throughout the period.

b. Support

As I mentioned previously, one of the primary thrusts of our rapid deployment programs is to provide more adequate support for our existing combat forces. Accordingly, the Army has programmed a significant increase in support structure spaces. In FY 1984, we will be able to deploy and sustain 3-1/3 Army divisions.

We will accomplish this by activating Active Army combat service support units (ammunition; petroleum, oil, and lubricants (POL); water; medical; transportation; maintenance; and engineers) specifically for our rapid deployment forces. With the addition of these units, we expect the Active Army to be able to support over half of the rapid deployment requirement. The remaining units will be drawn from the Reserve Components. Since some critical support units, such as medium truck companies and engineer battalions, are dual-hatted for NATO, we are identifying Reserve Component units that will need to mobilize immediately to deploy with our rapid deployment forces or to replace NATO-oriented units that may have deployed with our rapid deployment forces. In addition, our NATO allies are evaluating the possibility of providing Host Nation Support to alleviate the unit shortfall.

To permit early deployment of an initial force, the combat support and combat service support elements for the first divisions would be drawn primarily from active forces. The support for the remaining divisions would come primarily from Reserve Component units available after mobilization.

Because support requirements for our rapid deployment forces are so important and demanding, we are examining a wide range of near- and mid-term options to improve our capabilities, including asking our allies to assume a greater share of the support burden in NATO, expanding regional prepositioning, and upgrading Reserve Component support units.

Additionally, the Navy plans to convert and purchase two 1,000-bed hospital ships to support the medical needs of deployed Marine forces. The first ship is expected to be delivered in early FY 1986, and the second later that same year.

c. Strategic Mobility

Strategic mobility is the key to our rapid deployment planning, but our ability to project forces overseas is currently constrained by limited airlift and sealift resources. Sealift would be the dominant means of transporting our forces and equipment after the first few weeks of a deployment. During the early days of a conflict, however, before sealift takes effect, airlift and prepositioning would be our only means of rapidly deploying and sustaining our combat forces.

(1) Airlift

To meet our early force projection and resupply needs, we have placed a high priority on improving our airlift capability. We are pursuing four courses of action:

- -- Procurement of 50 additional C-5 cargo aircraft and 44 more KC-10 cargo/tanker aircraft to help reduce our airlift shortfall in the near term;
- -- Continued improvement of current airlift aircraft (e.g., C-5 wing modification and procurement of additional C-5 and C-141 spare parts);
- -- Acquisition of additional capacity through a restructured Civil Reserve Air Fleet (CRAF) Enhancement Program beginning in FY 1984; and
- -- Continued research and development on the C-17 airlift aircraft.

(2) Sealift

To improve our sealift capability, we have placed priority on converting the eight SL-7 fast sealift ships procured in FY 1981-82 to a roll-on/roll-off configuration by 1984-85. These high-speed (33-knot peak) ships could transport heavy forces to any theater.

To ensure that we can take full advantage of our rapid strategic mobility programs, we are funding on-load/off-load programs to allow us to use austere ports and to provide an over-the-shore capability. These improvements will also facilitate transferring cargo from one lift mode to another (i.e., from strategic sealift and airlift to intratheater air, sea, and ground transportation systems).

(3) Prepositioning

To improve our ability to deploy forces rapidly, we have initiated several sea-based prepositioning programs with a SWA orientation. Our prepositioning programs yield at least three benefits: (1) they give us a peacetime presence in the region; (2) they reduce deployment time to the region; and (3) they increase the amount of early combat capability in the region.

We already have on station a Near-Term Prepositioning Force (NTPF) of 18 chartered ships. Six of these ships carry unit equipment, medical facilities, and supplies for a heavily mechanized Marine Amphibious Brigade (MAB). The remaining 11 depot ships carry common-user water and POL, as well as materiel for early arriving Army and Air Force units. The NTPF depot ships will enable our forces to sustain combat operations until supplies can be shipped from the United States. The eighteenth NTPF ship is in the Mediterranean. Although the NTPF program, per se, will be phased out in 1986, the capability it has provided will remain. The Marine Corps equipment and supplies will become part of the third Maritime Prepositioning Ship Program task force, and the depot ships will remain on station to support Army, Air Force, and common-user requirements.

The medical facility NTPF ship, known as the Rapidly Deployable Medical Facility (RDMF), is a break-bulk ship carrying two 400-bed Army field hospitals and one 200-bed combat support hospital. In a crisis, these facilities would be moved to appropriate land locations to support deployed Marine Corps units. In June 1983, the Navy plans to replace these Army hospitals with equivalent Navy medical facilities, which will remain on station to support Marine Corps operations. The Army hospitals will then be stored in Europe as part of the POMCUS program.

The goal of the Maritime Prepositioning Ship (MPS) program is to preposition unit equipment and supplies for three Marine Amphibious Brigades (MABs). In time of crisis, the troops and their remaining materiel (those items that could not be prepositioned) would be airlifted into theater marry-up sites to meet the MPS. The MPS, unlike the NTPF, will contain self-sustaining roll-on/roll-off ships that will be able to unload cargo more quickly in austere ports or over the shore. The MPS program will allow us to deploy additional forces to SWA earlier than if they had to use available sealift.

We expect the first MPS task force to be on station in late 1984 and the second in 1985. Our current plans call for the NTPF MAB to be replaced by the third MPS task force in 1986, a full year ahead of schedule. Due to the global mission of the MPS and the need for fleet security, the first and second MPS task forces will be stationed at different locations, but where they can still meet their deployment objectives for a SWA contingency.

### (4) Other Mobility Considerations

Due to the limited availability of ports and airfields in SWA, its adverse terrain and climate, and the extremely limited surface transportation network, intratheater transportation will be critical to our success in the region, or in other locations where our rapid deployment forces might be needed. Without adequate intratheater airlift, sealift, and ground transportation networks, we could be forced to concentrate in less defensible locations near major airfields and seaports, rather than in key defensive positions of our choosing. We must also develop an efficient and effective capability to integrate our strategic and tactical mobility systems. We have selected deployment units and mobility improvement programs with these considerations in mind.

Since our sealift and airlift forces enhance our mobility capabilities in general, rather than for one specific theater, they are discussed in greater detail in the Mobility chapter of this report.

### d. Command, Control, Communications, and Intelligence Support

$C^3I$ systems are the "central nervous system" of our military forces. Without the vital services they perform, our deployed combat forces could not function effectively. We rely on our $C^3I$ systems, for example, to provide strategic and tactical warning of an attack, and to support communications not only among our force components but between our theater commanders and the National Command Authorities (NCA) as well. For areas such as SWA that lack an established communications infrastructure, rapidly deployable and reliable $C^3I$ is especially critical. In SWA, an area about two-thirds the size of the United States, we must provide real-time command and control over distances perhaps as long as that between Chicago and Miami -- a difficult enough requirement even in the absence of an enemy who will make every effort to disrupt our communications. Therefore, we must procure equipment that is capable of long-distance communications, resistant to jamming, and transportable.

$C^3$ support for our rapid deployment forces will be provided jointly by the Joint Communications Support Element (JCSE), the Services, and the Defense Communications Agency (DCA). Modernization of rapidly deployable $C^3$ equipment is being carried out under programs designed to support U.S. forces in all theaters. Such programs include ground mobile satellite terminals, tactical voice communications (SINCGARS, HAVE QUICK, Improved HF), tactical data distribution (JTIDS, PLRS/JTIDS), and tactical switched communications (TRI-TAC). These and other ongoing programs in positioning and navigation, airborne warning and control, and electronic warfare will significantly improve $C^3$ support for our rapid deployment forces.

Intelligence support for CINCCENT is a formidable problem given the extreme distances involved and the likely dispersion of forces in the SWA region. We are therefore providing funding for the near-term purchase of responsive, lightweight, and maintainable reconnaissance equipment with associated communications for CINCCENT-designated units.

### e. Facilities Access

We must rely heavily on airlift and sealift to deploy and sustain our rapid deployment forces, especially in SWA. This creates a particular challenge to protect them en route, primarily against Soviet submarine, fighter, and long-range bomber/cruise missile threats. Our maritime forces are already spread thin and, for the most part, may be the only military presence we have in the region during peacetime and at the outbreak of hostilities. To alleviate some of our shortfalls, we are expanding the scope and number of joint-Service programs for SWA (for example, storing Army and Air Force materiel aboard prepositioning ships). We are also continuing to seek access to facilities along the ALOCs and SLOCs, to and within SWA, from which to support deployment of our forces more adequately.

En route access provides facilities and support for airlift and sealift, as well as locations for conducting air-based anti-submarine and maritime patrol aircraft operations. It also includes overflight rights necessary to shorten flight times to the region.

Access to in-theater facilities, such as airfields and debarkation ports, provides for the reception of incoming units, allows early link-up with heavy equipment arriving by sealift, provides sites to stockpile supplies for sustaining combat, and in some cases provides sites from which we can conduct combat operations.

We have reached formal agreement with several nations, and are pursuing negotiations with others, for permission to preposition materiel, to use regional facilities during crises, or to conduct routine training exercises during peacetime. In some cases, it has been necessary to improve the existing facilities and infrastructure. Construction at these sites was initially funded in FY 1980-81, and most of the programs are scheduled to be completed by the end of FY 1987.

Table III.E.3 shows our funding requirements for military construction projects in countries where we have, or expect to gain, access; the discussion that follows provides more detail on the specific projects.

It is important to reiterate that we are not creating any new U.S. bases, per se, in SWA. Rather, we are improving existing host nation facilities that we might use in crises or for peacetime support of U.S. forces in the region, and are arranging for prompt access when needed.

TABLE III.E.3

Military Construction Funding for Rapid Deployment-Related Facilities [1]
($ Millions)

| Location | FY 1980-83 Appropriated |
|---|---|
| Egypt (Ras Banas) | 91 |
| Oman | 224 |
| Kenya | 58 |
| Somalia | 54 |
| Diego Garcia | 435 |
| Azores (Lajes) | 67 |
| Other locations | -- |
| Total | 929 |

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[1] Does not include planning and design costs.

Egypt has offered to permit our forces access to its facilities, including the strategically located facility at Ras Banas on the Red Sea, where we have undertaken a construction program to build an austere capability. The improvements will include upgrading the airfield and port facilities and constructing an austere cantonment. Once construction is completed, access to Ras Banas in time of crisis may allow us to deploy forces near a potential conflict area in SWA or the Middle East much sooner than if we had to wait until we could directly enter the affected country. However, apart from providing caretaker forces for U.S. facilities and participating in routine exercises with Egyptian forces, we will maintain no peacetime military presence in Egypt.

By agreement with the United Kingdom, we are upgrading facilities at Diego Garcia to increase the capacity of its airfield to accommodate en route refueling and to prepare for mooring additional MPS and ammunition ships there.

We are currently upgrading facilities at Lajes Air Base in the Azores and are seeking agreement with Portugal to increase the fuel storage capability there to support rapid deployment operations and enhance our current capability to support ongoing operations.

Enhancements at Lajes are important for supporting airlift to SWA as well as to other theaters.

We have reached agreement with Oman permitting us to improve selected facilities for our use, primarily during crises but also in peacetime. These planned improvements include upgrading runways, taxiways, and aprons, as well as constructing support facilities for for personnel and maintenance. Omani facilities could be very important for sea control and support of naval forces.

We have relatively small but important construction projects nearing completion in Kenya and Somalia. The government of Kenya has agreed to allow our forces to use its airfield and port facilities at Mombasa. This port is useful for maintaining and refueling our ships, including aircraft carriers, and offers one of the few locations in the region for crew rest and liberty. Somalia has allowed us access to its seaports and airfields at Mogadiscio. These agreements demonstrate the success, and importance to our strategy, of our military construction program for this region.

### f. Readiness, Equipment, and Training

To improve the operational readiness of our rapid-deployment forces, we plan to procure additional equipment and, for SWA, will continue to maintain a peacetime naval presence and conduct a wide range of joint-Service exercises both in the region and in the United States.

Our rapid deployment forces may be called upon to operate in both mountain and desert terrain -- two demanding yet different environments. Force requirements vary accordingly, from mobile light infantry to mechanized units. We are obtaining additional tanks and tracked landing vehicles -- to be stored on maritime prepositioning ships -to give Marine Corps forces a greater capability against enemy armored forces. Both the Army and Marine Corps are evaluating their lightweight equipment needs and are streamlining their force structure to increase strategic mobility while maintaining combat power.

We expect to continue peacetime Navy and Marine Corps operations in the SWA region. We plan to keep one aircraft carrier battle group continuously on station in the Indian Ocean. In addition, a Marine Amphibious Unit will be positioned in the Indian Ocean about 50% of the time.

Our ability to conduct effective combat operations in SWA or elsewhere is enhanced through combat exercises in and out of theater, as well as through communications and logistics exercises and wargaming. Because we believe that exercises are essential for operational readiness -- as well as to demonstrate U.S. resolve in SWA -- we plan to continue a wide range of rapid deployment exercises both in the United States and in the SWA region. For example, our most recent exercise in SWA was JADE TIGER 83, held in late November-early December 1982. In this air-defense-oriented exercise, our joint forces conducted varied operations in Oman, Sudan, and Somalia. Although smaller than the previous year's BRIGHT STAR exercise, JADE TIGER 83 gave us the opportunity to conduct air intercept and air interdiction training and an amphibious landing in Oman, and air defense training in Somalia. An important aspect of the exercise was the opportunity to practice combined operations with the Sultan of Oman's Land Forces. JADE TIGER 83 involved Air Force F-15 interceptors and AWACS aircraft, Navy carrier-based aircraft, and Air Force B-52s (simulating enemy aircraft). This exercise successfully demonstrated our substantial capabilities, while identifying areas for future improvements.

In general terms, CINCCENT plans to conduct one exercise (either BRIGHT STAR or a communications exercise) in the SWA region each year. In years when BRIGHT STAR is not held, CINCCENT will schedule a division-sized GALLANT KNIGHT exercise in the U.S. Table III.E.4 summarizes recent and projected rapid deployment-oriented exercises.

TABLE III.E.4

Selected Rapid Deployment-Related Exercises

| Exercise | Frequency/Sponsor | Location | Description/Size2/ |
|---|---|---|---|
| GALLANT KNIGHT | Annual/CENTCOM | Ft. Bragg, NC | CPX/Corps |
| BRIGHT STAR 1/<br>or<br>GALLANT EAGLE 1/ | Annual/CENTCOM | SWA Region<br>or<br>United States | FTX/Brigade +<br>FTX/Division |
| Communications Exercise 1/ | Annual/CENTCOM | Varies | COMMEX |
| JADE TIGER | One-Time/CENTCOM | Oman/Sudan/ Somalia | Air Defense Exercise |
| Rapid Deployment Readiness Exercise | Varies/CENTCOM | United States | Alert Exercise Deploys Headquaters Elements for CINCCENT |
| BOLD EAGLE | Biennial/REDCOM | United States | CPX; FTX |
| BOLD STAR | Biennial/REDCOM | United States | CPX; FTX |

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1/ Will be held in the U.S. every other year (when BRIGHT STAR is held in SWA).

2/ CPX = Command Post Exercise
FTX = Field Training Exercise
COMMEX = Communications Exercise

In addition to conducting joint exercises, the Services are independently emphasizing rapid-deployment-related training.

3. Conclusion

Current events and trends over the past few years have reinforced the need for the United States to be able to protect its interests worldwide, and to play a major role in protecting the interests of our allies and other friendly nations. Our FY 1984-88 defense program clearly recognizes the importance and urgency of our rapid deployment programs in building toward that goal and, accordingly, provides real capabilities to protect our vital interests -- with force if necessary.

By the end of the program period, our Unified Command for SWA will have access to a combat-ready force capable of rapidly deploying and sustaining a substantial number of ground divisions with appropriate air and naval support. This is a significant increase from the two divisions plus support we maintained in the late 1970s and the roughly four divisions supportable now. This future force projection capability will not be limited to use in SWA. Most of our rapid deployment forces and equipment will be able to deploy to regions outside SWA just as easily and quickly. Furthermore, our planning is taking this flexibility into account.

In the near term, however, we must continue to rely heavily upon deterrence, early use of strategic warning, and forces that may have dual commitments for other theaters. The risk of doing this, while great now, will be reduced substantially as our programs take effect.

We are continuing to evaluate and strengthen all aspects of our rapid deployment forces and related programs. In many cases, we have reexamined the way we do things and have made some very difficult decisions, especially about command organization, force structure, and mobility. In SWA, we will continue to show our commitment and capability, while accumulating valuable experience for our forces. We will continue to work closely with the State Department to build closer and more cooperative relationships with the regional states of SWA and to integrate our programs as smoothly as possible with whatever host nation support may be available. We are confident that our programs for our rapid deployment forces are well designed, and will give them the priority necessary to ensure their implementation.

## F. MOBILITY FORCES

### 1. Introduction

### a. The Role of Mobility Forces

Mobility forces are an indispensable component of our global response capability. They allow us to project power worldwide -- even to austere regions -- and sustain that power over long periods.

We must be able to move our combat and support forces rapidly with sufficient equipment and supplies to establish a solid military presence at distant locations where our interests are threatened. With that capability, we can make military action by opposing forces less likely and may decrease the force size needed for victory should deterrence fail.

In peacetime, a proven capacity for rapid deployment demonstrates a firm resolve to protect our interests and underwrites our commitment to friends and allies. We have been very careful, therefore, to include in our FY 1984 budget many of the mobility enhancements necessary to ensure a capable and balanced force.

#### (1) Intertheater Mobility

The term "intertheater mobility" refers to the movement of forces and materiel between major geographic regions or theaters of conflict. The scenario we consider most important in our mobility planning and programming is a U.S. reinforcement of NATO Europe to counter a Warsaw Pact buildup or attack, preceded by a deployment of U.S. forces to Southwest Asia (SWA) to counter Soviet aggression in that region. If we can meet the mobility needs of this scenario, we believe we will be equipped to handle contingencies in other parts of the world as well. Each deployment would require the initial movement of combat units and associated support to the conflict theater as well as follow-on transits to carry reinforcing units and materiel to sustain them in combat. In most instances, this would be accomplished through a combination of airlift and sealift, augmented by prepositioned equipment and supplies.

In designing our mobility programs, we consider both military and civilian airlift and shipping capability and the assistance we can expect from our allies. As a rule, we add military aircraft and ships to build capability that is not available, or that is in short supply, in the civilian sector. For instance, we do not build military passenger aircraft for troop deployments since there are adequate civilian aircraft available. Our airlift, sealift, and prepositioning programs are aimed at maintaining the entire system in balance.

Our airlift fleet is designed to carry the full range of combat and support equipment -- from items loaded on small pallets (measuring about 65 square feet) to M1 tanks (353 square feet and eight feet high). We group equipment into three categories -- bulk, oversize, and outsize items -- and categorize cargo aircraft by the size of equipment they can carry.[1] The commercial air cargo trade is almost exclusively in bulk and oversize items, and civil cargo aircraft are sized accordingly. Therefore, our military airlift forces must meet the outsize requirement as well as provide additional oversize and bulk capability.

In theory, we would like our aircraft to carry the type of cargo for which they are best suited. We strive for an airlift force that is balanced, with bulk and oversize equipment moved on bulk and oversize carriers and outsized equipment moved on outsize carriers. In practice, however, in order to meet the theater commanders' requirements, we must deliver complete, combat-ready units as quickly as possible. This imposes a constraint on the optimum matching of cargo types to aircraft types.

In our current programming scenarios, we sometimes use outsize aircraft to transport oversize equipment, particularly when moving Air Force units, since they have relatively few outsize items of equipment, and our outsize aircraft perform well in this role. When moving Army and Marine Corps units, we rapidly reach an outsize constraint: there is more outsize equipment to move than there are outsize cargo aircraft. When this happens, a unit must wait in theater for its outsize equipment to be delivered. During this time the unit is not fully effective.

After careful consideration of the types of equipment that will have to be moved by air, we are adding the outsize aircraft we need to reduce the current outsize constraint. This will yield a force with a balanced bulk, oversize, and outsize capability for use across a reasonable range of deployment scenarios.

Just as our airlift programs must be carefully balanced, we must consider the overall balance among our airlift, sealift, and prepositioning programs. Airlift and prepositioning are closely linked. By prepositioning equipment for some of our forces in peacetime, we need only move the troops and limited residual equipment at the outbreak of a crisis. The remaining equipment consists of items that are too expensive to preposition, such as helicopters, and items that do not store well. For a typical Army division with prepositioned equipment in Europe, the equipment that we would have to airlift weighs about 3,000 short tons and is 58% outsize by weight. An additional 60,000 short tons of unit equipment would be prepositioned awaiting the troops' arrival.

Prepositioning is effective only if there is sufficient airlift to move the remaining equipment and personnel in a matter of days. If the response time grows too long because of limited airlift and approaches that of sealift, the value of prepositioning is lost.

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1/ Bulk items measure less than 104 inches long, 84 inches wide and 96 inches high (pallet-size limits); oversize items are larger than bulk items and measure less than 1,090 x 117 x 105 inches (C-141 limits); outsize items are larger still, measuring less than 1,453 x 144 x 156 inches, or 1,453 x 216 x 114 inches (C-5 limits).

Based upon detailed analyses of the types and sequencing of forces to be moved, we have attempted to design mobility programs that will produce the greatest capability possible within expected funding.

### (2) Intratheater Mobility

The term "intratheater mobility" refers to the movement of forces and supplies within a theater of operations from their air or sea ports of debarkation to their initial destination, and subsequent movement in response to the tactical situation. Some units would travel by road, using their own vehicles. Others, lacking their own surface or air transportation, must rely on intratheater mobility support.

Any of a number of transportation modes might be available to us for intratheater moves. In some cases, the host nation may provide road or rail transportation for some of our forces; in others, we would have to provide trucks, aircraft (such as the C-130), or helicopters (such as the CH-47) to move them, or to supplement the transportation provided by the host nation. When intratheater transportation must be provided by the Services, we design our intertheater mobility schedule accordingly, placing the necessary intratheater transportation units early in the deployment sequence.

Our deployment planning must also consider arrangements for unloading and transferring cargo at the port of debarkation. In a NATO reinforcement, we would rely on host nations to furnish this logistical support. Some regions, however, do not have adequate port capacity or the capability to unload today's modern non-self-sustaining container ships. For deployments to these areas, we would have to provide a substantial amount of support equipment and personnel to complete the job. In such cases, transportation for these units must also be scheduled early in the deployment sequence.

### b. Mobility Objectives

Our long-term goal is to be able to meet the demands of a worldwide war, including concurrent reinforcement of Europe, deployments to Southwest Asia (SWA) and the Pacific, and support for other areas. For the program period, our goal is to be able to reinforce NATO with six Army divisions, a Marine Amphibious Brigade (MAB), and 60 tactical fighter squadrons -- all with initial support -- in 10 days, or to deploy a joint task force and required support forces to SWA within six weeks.

Given the Soviets' capability to launch simultaneous attacks in SWA, NATO, and the Pacific, our long-range goal is to be capable of defending all theaters simultaneously.

Our NATO reinforcement objectives are designed to augment our forward-deployed forces in NATO Europe with the mobile reserve forces essential to block Warsaw Pact breakthroughs. While sealift can deliver follow-on forces and supplies, it cannot meet the immediate deployment requirements for the initial combat forces and their support. Airlift can move troops quickly, but the amount of equipment to be moved in the first two weeks of a deployment far exceeds the capacity of our existing airlift fleet. Therefore, we rely on a combination of prepositioned equipment and airlift to meet our rapid reinforcement objectives. Our airlift program will permit us to meet the "10-division-within-10-day" objective only if combined with the six-division-set prepositioning program discussed later in this chapter.

Our deployment objectives for a Southwest Asian contingency are based on deterring Soviet aggression in the region. To accomplish this, we must be able to deploy initial light ground combat units and tactical air forces rapidly to establish air defenses and occupy key positions. We must also be able to support those forces and follow-on units in relatively primitive mountain and desert areas while completing the movement of forces to SWA.

Our deployment objectives for Northeast Asia are based on augmenting U.S. forward-deployed forces to deter or defeat a North Korean attack on the Republic of Korea. In a worldwide conflict, our objective is to be able to deploy additional forces to South Korea, while resupplying the forward-deployed forces there -- in addition to supporting simultaneous operations in NATO and SWA.

Our overall mobility requirements are determined by the size and type of forces to be moved and by the required delivery date at their final destination. Determining these requirements involves a two-step process: the forces for each Service must first be time-phased according to a priority scheme, and then priorities among all four Services' requirements must be established. The result is a detailed list of forces to be moved and the order in which they are to be scheduled.

### c. Existing U.S. Mobility Forces

Table III.F.1 summarizes our major organic mobility assets for intertheater and intratheater deployments. Not shown are the commercial aircraft and ships committed to DoD for use in time of war or national emergency. The long-range international portion of the Civil Reserve Air Fleet (CRAF) consists of 215 passenger aircraft and 109 cargo aircraft, or about 90% of the long-range international passenger and all of the long-range international cargo aircraft in the U.S. commercial inventory. Our merchant fleet contains 242 dry cargo ships, 173 of which are available by charter or government contract under the Sealift Readiness Program, which operates at no direct cost to DoD. Our medium-lift helicopter programs, essential for intratheater mobility, are discussed in the Land Forces chapter of this report.

### d. Assistance from Allies

To augment our own mobility forces in a NATO reinforcement, we would rely on ships and aircraft provided by our NATO allies to carry our troops and materiel to Europe. These commitments enhance our reinforcement capability, while freeing some of our airlift and sealift resources for other missions. To date, the NATO allies have earmarked about 600 of their most militarily useful ships for use in a NATO reinforcement. The Allies have also agreed to commit 44 of their long-range cargo aircraft and some passenger aircraft for this purpose. Since the demands for airlift in the early phases of a NATO reinforcement exceed our airlift capability, we would like to see this cargo and passenger airlift commitment increased.

## TABLE III.F.1

## U.S. Military Mobility Assets (FY 1983)

Aircraft:

| Active Forces Aircraft | Inventory 1/ |
|---|---|
| C-5 | 70 |
| C-141 | 234 |
| KC-10 | 12 |
| C-130 | 218 |
| CH-47/CH-54 | 333 |
| CH-53 | 161 |

| Reserve Forces Aircraft | Inventory 1/ |
|---|---|
| C-130 | 294 |
| C-7/C-123 | 19 |
| CH-47/CH-54 | 169 |
| CH-53 | 18 |

Dry Cargo Vessels:

| | |
|---|---|
| Military Sealift Command | 37 |
| Ready Reserve Fleet | 29 |
| Other National Defense Reserve Fleet Ships | 167 |

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1/ Aircraft numbers are primary aircraft authorized (PAA) in operational squadrons. PAA is used for planning and programming purposes, and does not reflect the Total Aircraft Inventory (TAI). Training squadron PAA are not included in the table.

### 2. FY 1984-88 Programs

Our FY 1984-88 mobility programs will enhance our capability to meet our deployment objectives. The additional airlift procurement we have proposed, together with improvements in sealift and prepositioning, will move us close to our goal of meeting the mobility demands for a NATO reinforcement or a Southwest Asian deployment. Meeting our long-term goal of concurrent deployments will require further increases in airlift and sealift, as well as additional prepositioning.

#### a. Airlift Improvements

#### (1) Expanding Airlift Capability

Our airlift program adds capability as quickly as possible, while maintaining a balance with existing civilian and military aircraft. We are requesting funds over the next five years to procure additional C-5 and KC-10 aircraft, while continuing to investigate methods of increasing the Civil Reserve Air Fleet. By procuring additional C-5s and KC-10s, we can add airlift and tanker capability with minimum risk in cost, scheduling, and performance.

The C-5 adds to our capability to move outsize equipment, such as large weapon systems and vehicles. We have negotiated a firm, fixed-price offer from the prime contractor to produce 50 additional C-5 aircraft. The C-5 is our most flexible mobility resource; it can be refueled in flight and can carry a wide mix of unit equipment to any theater.

The KC-10, which can operate either as a tanker or as an airlift aircraft, is a particularly valuable component of our airlift forces. As a tanker, it can give the C-5 and C-141 worldwide capability without the need for intermediate basing. As an airlift aircraft, it can move bulk and oversize equipment and supplies. It can also operate in a mixed role when deploying fighter squadrons, carrying fuel for the deployment as well as a significant amount of cargo.

The CRAF Enhancement program compensates U.S. commercial airlines for the additional costs of buying and operating wide-bodied passenger aircraft that can be converted quickly to carry military cargo. Of all our airlift programs, this is the least expensive means of adding cargo capability. We are currently formulating a revised request to industry for participation in the program.

While our FY 1984-88 program adds airlift capability at an accelerated rate, it will not satisfy our future airlift requirements. We must therefore continue to investigate additional aircraft procurement programs that would enable us to increase the capability, responsiveness, operational flexibility, and reliability of our airlift forces. Accordingly, the FY 1984 budget includes a request for funds to continue research and development related to the C-17 cargo aircraft. Intended to contribute to our intertheater airlift needs as well as provide intratheater capability, the C-17 will be able to carry the full range of military equipment, including the M1 tank and most other outsize cargo that only the C-5 can carry now. It will also be able to operate from austere airfields, thus greatly improving our ability to respond to global contingencies.

### (2) Additional Airlift Improvements

Meeting our airlift objectives requires that we improve our existing forces, as well as acquire additional capacity. Our five-year plan therefore continues several ongoing programs that will enhance the capability of our current forces.

Structural deficiencies in the wings of our C-5A aircraft now limit their use to 7,100 hours, which most of the force will have accumulated within the next five years. To correct this problem, we are continuing a modification program that will extend the service life of our C-5 force to at least the year 2000. The production line began in FY 1982, and all 77 aircraft in the inventory will be modified by FY 1987.

We have also programmed funds to procure additional spare parts for our C-5s and C-141s to increase their wartime utilization rates. In addition, we are continuing two programs to improve our intratheater mobility capability. We are modifying the Army's fleet of CH-47 helicopters to increase their operational capability, and we are continuing to procure CH-53E heavy lift helicopters for the Marine Corps. These programs are discussed in the Land Forces chapter.

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Planned Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| C-5 | | | | |
| Procurement: | | | | |
| Quantity | -- | 1 | 4 | 10 |
| $ Millions | | 803.4 | 1,403.7 | 2,380.3 |
| KC-10 | | | | |
| Procurement: | | | | |
| Quantity | 6 | 8 | 8 | 8 |
| $ Millions | 234.5 | 933.6 | 813.0 | 715.0 |
| CRAF Enhancement | | | | |
| $ Millions | 47.7 | -- | 147.4 | 173.0 |
| C-5 Wing Modification | | | | |
| Quantity | 18 | 18 | 24 | -- |
| $ Millions 1/ | 239.2 | 297.6 | 349.3 | 105.7 |
| C-17 Cargo Aircraft | | | | |
| Development: | | | | |
| $ Millions | -- | 60.0 | 26.8 | 32.6 |

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1/ Includes operations and maintenance (O&M) costs for installation of wings on the production line.

b. Sealift Programs

Sealift is vital for projecting and sustaining our forces in distant conflict regions. In a large deployment, it would deliver a majority of the cargo, including much of the non-prepositioned equipment for armored and mechanized forces and support units, as well as most of our supplies and ammunition.

(1) Fast Sealift

The need to move forces rapidly, while maintaining deployment flexibility, has caused us to look for ways to decrease the response time of sealift. In FY 1981-82, we acquired eight high-speed (33-knot) SL-7 container ships -- the fastest cargo ships available. To maximize their utility for carrying military cargo, we have placed high priority on converting them to a "roll-on/roll-off" configuration, thereby shortening loading and unloading time and increasing their capability to move Army units. Funds for conversion of the first four SL-7s were provided in FY 1982. We are requesting funds in FY 1984 to complete the full conversion of the remaining four (for which advanced funding was provided in FY 1983).

### (2) Ready Reserve Fleet

The Navy has also programmed funds to expand the size of the Ready Reserve Fleet (RRF). A part of the National Defense Reserve Fleet, the RRF contains 29 cargo ships that have been upgraded to make them available for use within five to ten days after notification. By contributing to the early availability of shipping, the RRF program reduces the time required to begin sealift operations. Our five-year program calls for expansion of the force to 77 ships (61 cargo ships and 16 tankers) by FY 1988.

### (3) Container Ship Utilization

The shift to containerization by the maritime industry has significantly increased shipping companies' productivity but, at the same time, has increased the number of container ships in the U.S.-flag fleet. Commercial container ships are of limited military utility, and most require modernized port facilities to load and unload cargo.

The primary military use of container ships is for the movement of resupply and ammunition. Unit equipment can be best moved on roll-on/roll-off, breakbulk, or barge ships. Since many shipping companies are replacing breakbulk ships with container ships, we are exploring ways to increase the military utility of container ships.

We are requesting funds to continue the development and procurement of sea sheds and flat racks, which will enable us to carry large equipment items aboard container ships. A sea shed is a large container with a folding, or "work through," floor. These are installed in reinforced container guides and provide a cargo hold accessible from the main deck that can support large items of equipment. When the bottom shed is loaded, the movable floor of the sea shed above is lowered, and it is loaded. The procedure is reversed to unload the ship. Once fitted, the sea sheds can remain in the ship. Flat racks give a container ship a similar capability, but they lack a "work through" capability and must therefore be loaded and unloaded with the cargo. Flat racks and sea sheds increase the utility of container ships -- the most rapidly increasing ship type in both the U.S.-flag and NATO fleets.

### (4) Sealift Discharge

Deployments to SWA may require the discharge of cargo and petroleum, oil, and lubricants (POL) in non-modernized or damaged ports or in areas lacking port facilities. To permit us to operate under those conditions, the Army and Navy have begun programs to improve our ability to unload container ships and discharge cargo and POL over the beach. These programs will enhance the flexibility of our sealift forces, while increasing the military utility of modern container ships.

The Navy is also continuing several programs to improve the capability of container ships and to provide mobile port facilities. It is developing an auxiliary crane ship that would be used to unload cargo from container ships that lack their own cranes. It is also procuring mobile piers, called elevated causeways, that can be installed within 72 hours. In addition to these programs, the Army has programmed funds to replace obsolete water craft in its inventory and to produce facilities for unloading tanker ships and storing POL and water ashore.

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Planned Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| SL-7 | | | | |
| Procurement: | | | | |
| Quantity | 2 | -- | -- | -- |
| $ Millions | 68.4 | -- | -- | -- |
| Conversion: | | | | |
| Quantity | 4 | -- | 4 | -- |
| $ Millions | 336.3 | 44.0 | 252.5 | 11.9 |
| RRF | | | | |
| Procurement: | | | | |
| Quantity | 3 | 9 | 9 | 9 |
| $ Millions 1/ | 14.5 | 19.9 | 56.8 | 64.5 |
| Container Ship Utilization | | | | |
| Procurement: | | | | |
| $ Millions | 0.0 | 6.7 | 10.5 | 34.7 |
| Sealift Discharge | | | | |
| Procurement: | | | | |
| $ Millions | 27.2 | 9.7 | 62.5 | 167.7 |

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1/ Includes procurement and operations and maintenance funding.

### c. Prepositioning

To meet our mobility objectives in the early days of a deployment, we have undertaken several programs to store equipment and supplies in Europe, Southwest Asia, and the Pacific for U.S.-based forces that would deploy there in time of crisis. With most major items of equipment prepositioned near the region, combat units and their residual equipment could be airlifted to the conflict area with a substantial reduction in delivery time.

#### (1) Land-Based Prepositioning

Army. Under the POMCUS program, we have prepositioned the heavy equipment of Army divisions and supporting units in Europe. We have a commitment to our NATO allies to provide a total of six division sets of equipment. Equipment for three divisions was prepositioned in the 1960s, and we are currently completing work on the fourth set. Our allies have provided the land for the fifth set in Belgium and the sixth set in the Netherlands, and $182 million in NATO Infrastructure funding has been allocated to build storage facilities for these sets. Construction for both has begun and is scheduled to be completed in FY 1984 and FY 1985, respectively.

To begin shipment of equipment for POMCUS division sets five and six, we are submitting an FY 1983 Supplemental Appropriation request for $32.0 million. We are also requesting the Congress to remove the restriction in the FY 1983 Defense Appropriations Act that prohibits shipping equipment for more than the first four sets. The FY 1984 budget requests funds to continue shipment of equipment for the final two sets.

The POMCUS program was begun in response to the generally accepted concern that our ability to reinforce NATO was seriously inadequate to meet the Warsaw Pact threat. In particular, SACEUR had no readily available forces in reserve to block Pact breakthroughs. The need for rapid deployment of heavy, mobile forces is as great today as it was when the program was first proposed.

The mobility alternatives to POMCUS are expensive. A fast sealift program equivalent to POMCUS sets five and six would require an additional $4 billion to $5 billion and would take at least five years to complete. An airlift alternative would be prohibitively expensive and could not be completed until well into the 1990s.

We recognize and share the concern of the Congress that the creation of POMCUS uses equipment that might otherwise be issued to fill shortages in units. To alleviate this effect, we have increased funding for the types of equipment that are in short supply. Unit readiness and rapid reinforcement are important problems that must be solved in parallel. The value of either is reduced without the other.

In summary, the POMCUS program provides the rapid response capability for heavy Army divisions that will enable us to meet the Warsaw Pact threat. Other alternatives, whether airlift or sealift, would be much more expensive and take longer to complete. I urge the Congress to reconsider its decision on this essential program.

Air Force. The Air Force began several prepositioning programs for Europe and Southwest Asia in FY 1983 and has an ongoing program in South Korea. The European program will preposition equipment for tactical fighter forces. The Southwest Asian program provides funds for the procurement, transportation, storage, and maintenance of additional support equipment.

Marine Corps. The Marine Corps is continuing a land-based prepositioning program in Norway, where it is storing equipment for a Marine Amphibious Brigade (MAB) to assist in the defense of NATO's northern flank.

### (2) Maritime Prepositioning

Our FY 1984-88 maritime prepositioning program provides a rapid deployment capability for combat forces and supplies. Under the Maritime Prepositioning Ships (MPS) program, the Navy is providing 13 chartered ships to preposition equipment and supplies for three MABS. These ships are capable of discharging cargo in ports or over the shore, and the equipment and supplies are stored so that the combat capability is not dependent on any single ship. The ships and equipment for the first brigade will be on station in 1984; the remaining two brigades will be prepositioned by 1985 and 1986, respectively. This will complete the three-brigade program more than a year ahead of schedule.

Our program to preposition supplies aboard ships began with the current Near-Term Prepositioning Force (NTPF) and depot ship programs. In July 1980, we began the NTPF by prepositioning equipment and supplies for one MAB in SWA. To this, we have added additional ammunition, supply, POL, and medical ships for the Marines and early arriving Air Force and Army forces, and today have a total of 18 prepositioned ships. Upon completion of the MPS program, the Marine Corps portion of the NTPF (now six ships) will be replaced with the third MPS brigade, and the depot ships will remain on station. Table III.F.2. illustrates this transition. By FY 1986, we will have equipment and supplies for a division-sized Marine combat force stored on 13 MPS ships, and supplies to maintain early arriving Army and Air Force units stored on 12 depot ships.

TABLE III.F.2

Maritime Prepositioning Programs
(Brigade Equivalents/Number of Ships)

| Program | FY 1983 | FY 1984 | FY 1985 | FY 1986 |
|---|---|---|---|---|
| MPS | 0/0 | 1/4 | 2/8 | 3/13 |
| NTPF | 1/6 | 1/6 | 1/6 | 0/0 |
| Depot Ships | -/12 | -/12 | -/12 | -/12 |
| Total | 1/18 | 2/22 | 3/26 | 3/25 |

Although the current emphasis of our maritime prepositioning programs is on SWA, these programs also reduce our deployment time to conflict regions worldwide. In essence, all of our maritime prepositioning programs have a global application, and their component parts can be repositioned -- even on a ship-by-ship basis -- as our military commanders deem necessary.

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Planned Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| Army Land-Based Prepositioning | | | | |
| $ Millions | 158.0 | 209.0 | 227.0 | 207.0 |
| Air Force Prepositioning 1/ | | | | |
| $ Millions | 165.0 | 110.0 | 128.0 | 108.0 |
| Marine Corps Prepositioning | | | | |
| $ Millions | 22.2 | 29.3 | 36.5 | 18.9 |

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Planned Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| Maritime Prepositioning Ships 2/ | | | | |
| $ Millions | 253.5 | 239.5 | 444.8 | 549.9 |
| Near-Term Prepositioning Ships and Depot Ships 2/ | | | | |
| $ Millions | 199.7 | 211.6 | 253.0 | 279.3 |

---

1/ Includes procurement and operations and maintenance funding.
2/ Includes Marine Corps equipment acquisition and maintenance costs.

### 3. Conclusion

Our FY 1984-88 program makes significant improvements to our intertheater mobility forces, adding capability as quickly as possible while maintaining an appropriate force balance. Our proposal to add 50 C-5s and 44 KC-10s to our airlift forces, along with our plan for a restructured CRAF Enhancement Program, will increase both the capability and the flexibility of our mobility forces. Our request for funds to convert our SL-7 ships to a "roll-on/roll-off" configuration will add militarily useful fast sealift as early as FY 1984, with eight ships available by FY 1986. Over the next five years, we will also more than double the size of the Ready Reserve Fleet, while increasing our capability to unload ships and tankers in areas lacking modern port facilities. Finally, our planned and existing prepositioning programs, in conjunction with our airlift forces, will improve our capability to deploy division-sized combat forces rapidly to distant conflict regions.

Our FY 1984-88 program will move us significantly closer to achieving our mid-term goals. While further improvements are necessary, it provides much-needed improvements in our capability to move conventional forces to threatened areas. Funding these programs will demonstrate our resolve to honor our commitments to our treaty partners and friends and to protect our interests worldwide.

## G. NUCLEAR FORCES

### 1. Introduction

The FY 1984 budget request represents a critical phase in our comprehensive program to revitalize our nuclear deterrent. It is essential that we maintain the momentum that we have achieved during this past year. The program continues to focus both on force survivability and command and control improvements in the near term, to maintain our deterrent, and on longer-term force modernization, to assure our security into the coming century. Strategic offensive and defensive forces, as well as non-strategic nuclear forces, are included in this comprehensive plan to maintain the balance of nuclear power.

Strategic offensive forces include land-based intercontinental ballistic missiles (ICBMs); sea-based submarine-launched ballistic missiles (SLBMs); and long-range bombers armed with short-range attack missiles (SRAMs), air-launched cruise missiles (ALCMs), and gravity bombs. Maintaining three diverse, but complementary, forces (collectively referred to as the "strategic nuclear triad") ensures our ability to retaliate by compounding the problems of a potential attacker and by compensating for vulnerabilities in any one of the triad components, thus strengthening deterrence.

Strategic defensive forces include air, ballistic missile, and space defense systems. The systems that perform attack warning and assessment, support command functions, and provide communications networks to control the strategic forces are collectively referred to as strategic command, control, and communications ($C^3$) systems.

Our non-strategic nuclear forces include intermediate-range nuclear forces (INF), such as bombs delivered by tactical aircraft and intermediate-range missiles; short-range nuclear forces (SNF), such as artillery projectiles and surface-to-surface missiles; land-based defensive systems, such as surface-to-air missiles and atomic demolition munitions; and sea-based systems. These non-strategic nuclear systems are deployed with land, naval, and air forces to enhance deterrence by providing capabilities at the lower end of the nuclear spectrum, firmly linking our strategic forces to our conventional capabilities.

### 2. FY 1984-88 Programs for Strategic Forces

Our FY 1984-88 program sustains the President's plan to modernize all five elements of the strategic forces, thus strengthening deterrence while providing a firm basis for arms reduction negotiations:

-- To enhance the survivability of the command and control network that supports our nuclear forces, we are upgrading the airborne command centers, as well as improving our early warning and communications systems. We are also continuing development of more enduring $C^3$ systems that will enhance the deterrent potential of our forces in the future.

-- To provide more immediate enhancement of our nuclear capability, we are deploying air-launched cruise missiles on our B-52 bombers. To ensure that the penetrating bomber force remains effective in the future, we have begun production of the B-1B bomber, with initial deployment scheduled for FY 1985, and are developing an advanced technology bomber (ATB) for deployment in the early 1990s. To reduce shortfalls in aerial tanker capability, we are purchasing additional KC-10 aircraft and reengining the KC-135A force.

-- To enhance our sea-based forces, we are developing the Trident II missile, with improved accuracy and a greater payload. We also plan to deploy nuclear-tipped cruise missiles on attack submarines, starting in 1984, to bolster our nuclear reserve forces.

-- To improve the effectiveness of our land-based ICBMs, we intend to deploy a force of 100 Peacekeeper missiles.

-- To revitalize our strategic defensive forces, we are replacing aging F-106 interceptors with modern F-15 and F-16 aircraft. We are also deploying more modern early warning radars to search approach corridors to our coasts. To ensure our continued security in the future, we are developing deep-space tracking sensors and airborne surveillance systems, while, at the same time, proceeding with research and development -- consistent with the terms of the 1972 ABM Treaty -- on a ballistic missile defense system.

### a. The ICBM Force

A more survivable and powerful ICBM is essential to redress the significant asymmetry in prompt counterforce capability that has developed since the Soviets began deploying their current generation of very accurate ICBMs in the late 1970s. An effective ICBM also provides a very powerful incentive for the Soviets to seek genuine arms reductions. Without the credible prospect of a capable ICBM force, the U.S. position in the ongoing Strategic Arms Reduction Talks (START) would be severely weakened. In addition, a highly capable and survivable ICBM will hedge against unexpected reductions in the effectiveness of other triad elements. Total reliance on bomber and SLBM forces in the long term could seriously undermine the credibility of our deterrent, should unforeseen threats or system deficiencies materialize. A strong triad has served us well in the past and is necessary for the future.

The Peacekeeper missile is intended to provide this needed modernization for our land-based ICBM forces. It is more accurate than our existing Minuteman missiles, will carry more warheads, and will be able to attack effectively the full spectrum of strategic targets.

Last year the Congress directed us to accelerate the schedule of our Peacekeeper basing study and to recommend a permanent basing mode by December 1982. Our analysis concluded that a closely spaced basing system offers great potential to improve the deterrent role of the ICBM force. An adversary could not be confident of mounting an effective attack in the face of "fratricide" effects enforced by the very hard silos and close spacing.

In accordance with Congressional requests, we will submit to the Congress in early 1983 a detailed technical assessment of the closely spaced basing system. This report will also compare closely spaced basing with other alternative ballistic missile deployment modes. Full-scale engineering development of a basing mode for the Peacekeeper missile will not be initiated until the completion of this report and the subsequent approval by the Congress of the President's basing recommendation.

As announced last year, we are retiring our aging force of Titan II missiles. Now 20 years old, these liquid-fueled ICBMs are quite expensive to maintain, and are of decreasing value to our overall strategic posture as the forces are modernized. We have begun to remove the missiles and expect to complete the deactivations in FY 1987. We are, however, conducting analyses to determine if these Titan II missiles should be used as space launch vehicles.

We are also conducting further research in FY 1984 on deep underground basing, a concept that may provide protection against nuclear attacks for extended periods. Such protection could be useful for ICBMs or, perhaps, for command and control facilities, but cannot be available before the 1990s.

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| Peacekeeper Missile and Basing | | | | |
| Development: | | | | |
| $ Millions | 1,899.7 | 2,505.8 | 3,378.4 | 2,901.2 |
| Construction: 1/ | | | | |
| $ Millions | 11.0 | 13.6 | 390.0 | 592.0 |
| Procurement: | | | | |
| Quantity | -- | 5 | 27 | 37 |
| $ Millions | -- | 988.0 | 2,867.9 | 4,007.4 |

---

1/ Excludes planning and design and family housing.

### b. Sea-Based Strategic Nuclear Forces

Our program for modernizing the SLBM force is designed to provide a credible sea-based deterrent well into the next century. Our ballistic missile submarine (SSBN) force, when at sea, is the most survivable element of our strategic triad of forces. Over the next five years, we are funding several programs that will further enhance its survivability, while increasing our deterrent capabilities at sea. Our program responds directly to the two most pressing needs of the SLBM force: achieving a capability to destroy hard targets and assuring continued high levels of SLBM capability as Poseidon submarines are retired.

The 31 Poseidon ballistic missile submarines now in the SSBN force were constructed in the 1960s. In the 1970s, they were converted to carry 16 Poseidon (C-3) missiles armed with multiple independently targetable reentry vehicles (MIRVs). Modifications enabling them to carry the more capable Trident I (C-4) missile were completed on 12 of these submarines late last year. Poseidon submarines will be capable of operating in the force until they reach a service life of approximately 30 years.

The newest addition to our sea-based deterrent force is the Trident submarine. The first Trident-class submarine, the USS OHIO, was deployed in the Pacific in October. The USS MICHIGAN, the second Trident submarine, has been delivered and is expected to deploy in 1983. Compared with the Poseidon, the Trident has more missile launch tubes (24 instead of 16) and will be able to carry the larger, more capable Trident II (D-5) missile. It is also designed to be significantly quieter than the Poseidon and to have increased patrol time at sea. Ten Trident submarines have been authorized through FY 1983, and we are requesting authorization of the eleventh this year. The FY 1984 request also includes funds to procure Trident II equipment for the ninth Trident submarine (authorized in FY 1981), the first ship to be fitted with the D-5 missile. (The tenth SSBN was fully funded as a Trident II submarine in FY 1983, and the submarine we are requesting this year will also be Trident II-capable.) In addition to avoiding the cost of initially equipping these latest three Trident SSBNs to carry C-4 missiles, this procurement schedule will allow us to accelerate the introduction rate of Trident II-equipped submarines.

The credibility of our sea-based deterrent will be further enhanced with the development of the Trident II missile. The Trident II will be deployed on all new SSBNs starting with the ninth Trident and will be retrofitted into the first eight Trident submarines as well. Designed to take advantage of the large Trident launch tubes, it will have greater accuracy and payload than the Trident I, providing the capability to attack all potential targets effectively from submarines. We plan to begin five years of full-scale development of the missile this year, with initial deployment scheduled before 1990. The FY 1984 budget also requests funding to procure the last 43 Trident I missiles to support Poseidon and initial Trident submarine deployments. We have reduced total Trident I procurement by 60 missiles, reflecting our plan to accelerate the introduction of Trident II-equipped SSBNs.

For the near term, we plan to deploy sea-launched cruise missiles (SLCMs) with nuclear warheads on attack submarines and surface ships. These missiles will strengthen our nuclear capabilities by providing survivable forces that can strike the full range of enemy targets.

|  | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| Trident Submarine |  |  |  |  |
| Procurement: |  |  |  |  |
| Quantity | -- | 1 | 1 | 1 |
| $ Millions | 484.2 | 1,883.9 | 2,476.4 | 2,030.8 |
| Trident I Missile |  |  |  |  |
| Procurement: |  |  |  |  |
| Quantity | 72 | 62 | 43 | -- |
| $ Millions | 876.8 | 662.8 | 596.7 | 210.0 |

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| **Trident II Missile** | | | | |
| Development: | | | | |
| $ Millions | 240.8 | 369.6 | 1,496.4 | 2,145.6 |
| Procurement: | | | | |
| Quantity | -- | -- | -- | -- |
| $ Millions | -- | -- | -- | 140.0 |

### c. The Strategic Bomber Force

Modernization of the bomber and tanker forces will dramatically improve the strategic balance in this decade. Bombers are survivable, flexible, and can attack effectively any strategic nuclear targets that are not time sensitive. The inherent flexibility of manned bombers greatly increases deterrence. In addition to their nuclear capabilities, long-range bombers can be used to support general purpose force operations. They can deliver large conventional payloads to distant targets, virtually anywhere in the world. They also provide a significant increase in the firepower available to theater commanders, and are useful in naval support roles.

Today's force of B-52 and FB-111 bombers will continue to provide a credible deterrent for the immediate future. By the end of the decade, however, when the Soviets are expected to have fielded a more formidable air defense system, our older B-52s will no longer be survivable in the penetrator role. We therefore plan to begin deploying the B-1B in 1985 to replace the B-52s in this most demanding mission, thus allowing the B-52s to transition to the cruise-missile-carrier role. Deployment of the air-launched cruise missile (ALCM), first on B-52s and later on the B-1B, will serve to improve our overall strategic capability while placing great stress on Soviet air defenses. The Advanced Technology Bomber will be deployed in the early 1990s to ensure that our bombers will be able to penetrate Soviet air defenses into the 21st century.

#### (1) Bomber Modernization

Our vigorous ALCM program will do much to improve the strategic balance. These small, low-flying, highly accurate missiles are effective against a wide range of targets, and they pose difficult problems for Soviet air defenses. By the end of FY 1984, we will have deployed ALCMs on 90 on-line (PAA) B-52Gs. Starting in 1985, as B-1B aircraft are deployed, we will begin to modify our B-52Hs for cruise missile carriage.

As stated previously, we do not expect our B-52 aircraft to remain effective penetrators until the ATB is deployed. The lack of an effective penetrating bomber in the late 1980s would constitute an unacceptable deficiency in our strategic forces, since this would permit the Soviet Union to focus its air defense efforts solely on the ALCM force, and it would severely limit our ability to attack moveable military targets critical to Soviet wartime objectives. To address this potential deficiency, we will introduce the B-1B during the latter half of this decade. We plan to deploy the first B-1B bombers in FY 1985, with the last of the planned force of 100 aircraft scheduled for deployment in FY 1988. The B-1B incorporates substantial improvements over the B-1A prototype and is an exceptionally capable and versatile long-range bomber. It will be employed as a strategic penetrator during the 1980s. As the ATB is deployed in the 1990s, the B-1B will carry cruise missiles as a part of its weapons mix, ensuring that it will remain an effective part of our bomber force throughout its projected operational life.

The B-1B program has benefited from our test experience with B-1A prototypes, substantially reducing developmental risk. We are confident that we can deliver the aircraft on schedule and within the $20.5 billion (FY 1981 $) cost ceiling.

Development of the ATB is proceeding at a vigorous but prudent pace toward a planned initial deployment date in the early 1990s. We expect that the ATB will be capable of penetrating all existing and projected Soviet air defenses well into the next century.

### (2) Current Bomber Forces

Within the framework of our modernization program, we are planning carefully for the most efficient future use of existing aircraft, which vary widely in age and in capability. We are proposing that the obsolescent B-52Ds (which are less capable and more costly to maintain than our other B-52 models) be retired at the end of FY 1983 and that the FB-111As be transferred to the tactical inventory as the ATB is deployed.

We expect our B-52Gs to serve effectively into the next decade. Those aircraft scheduled for cruise missile conversion will be assigned to nonpenetrating or "standoff" missions as the B-1B is deployed, while those not scheduled for use as cruise missile carriers will replace retiring B-52Ds in a conventional/maritime support role. Over the next decade, as the ATB is deployed and the B-1B assumes a cruise-missile-carrier role, we would expect to begin retiring the B-52G force.

Finally, we foresee a very long operational life for our B-52Hs, the latest B-52 model, as cruise missile carriers well into the 1990s.

We are proposing a number of modifications for both our B-52G and B-52H aircraft -- consistent with their intended missions and operational life. All of these aircraft are scheduled to receive a new offensive avionics system (OAS), radar upgrades, engine refurbishments, and other improvements needed to keep them effective in their planned missions.

### (3) Aerial Tankers

Aerial refueling support is essential to virtually all manned bomber missions -- strategic and conventional. At present, we do not have sufficient tanker capacity to support both strategic missions and tactical air operations simultaneously. While this could sharply limit our military options now, the problem could become even more severe in the future as we increase our inventory of aerially refuelable aircraft. To reduce these shortfalls, we are expanding our aerial tanker capability by reengining existing KC-135As and purchasing additional KC-10s.

Reengining KC-135s with current-technology CFM56 engines (the KC-135R program) will significantly increase their fuel-dispensing capability, while reducing their operating and maintenance costs. The KC-135R program also includes modernization of many aircraft subsystems, which will ensure the fleet's continued effectiveness well past the year 2000.

Since the KC-10 is being purchased primarily to meet shortfalls in our mobility forces, it is discussed in more detail in the Mobility chapter.

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| **B-52 Bomber** | | | | |
| Development: | | | | |
| $ Millions | 92.7 | 91.1 | 86.9 | 41.8 |
| Procurement: | | | | |
| $ Millions | 459.7 | 530.7 | 632.6 | 710.1 |
| **B-1 Bomber** | | | | |
| Development: | | | | |
| $ Millions | 471.0 | 753.5 | 749.9 | 491.8 |
| Procurement: | | | | |
| Quantity | 1 | 7 | 10 | 34 |
| $ Millions | 1,612.0 | 4,033.5 | 6,179.6 | 8,026.4 |
| **Air-Launched Cruise Missiles** | | | | |
| Development: | | | | |
| $ Millions | 99.9 | 137.0 | 28.5 | 28.5 |
| Procurement: | | | | |
| Quantity | 440 | 330 | -- | -- |
| $ Millions | 597.1 | 555.2 | 103.9 | 83.1 |
| **KC-135 Reengining** | | | | |
| Development: | | | | |
| $ Millions | 28.9 | 29.0 | 11.3 | 9.4 |
| Procurement: | | | | |
| Quantity | 9 | 17 | 30 | 65 |
| $ Millions | 225.5 | 375.6 | 895.8 | 1,440.9 |

### d. Strategic Defensive Forces

Our strategic defensive forces and associated $C^3I$ systems are an integral component of our deterrence strategy. We rely upon them to provide timely and reliable tactical warning of bomber and cruise missile attacks, to control access to North American airspace in peacetime and in time of crisis, and to provide a limited air defense in war. The past decade witnessed a troublesome decline in our air defense capabilities, as needed improvements were often deferred in the face of competing priorities. As a result, we have large gaps in our North American air defense warning network, our strategic air defense interceptors are obsolete, and our anti-satellite and ballistic missile defense research and development programs have lagged behind the Soviets'.

Our strategic modernization program ends these years of neglect, moving quickly to bolster the capability of each component of our strategic defense system. We are taking steps to improve our radar warning network and airborne warning system and to modernize our interceptor forces. We are also strengthening our space defense systems and pursuing an operational anti-satellite system. Finally, to provide possible future defense options, we are continuing a vigorous research and development program on technically advanced ballistic missile defense system concepts and related basic technologies. All of these efforts are consistent with the provisions of the 1972 ABM Treaty.

### (1) Air Defense

Currently, Soviet bombers flying at low altitudes could penetrate undetected through gaps in radar coverage over Canada and our ocean approaches. We are taking a number of steps to correct this deficiency in our air defenses. We plan to deploy new ground-based atmospheric surveillance radars and modern interceptors to provide timely warning of atmospheric attack, to control access to North American airspace, and to maintain a limited active defense capability. We also plan to buy additional Airborne Warning and Control System (AWACS) aircraft to augment and support our radar network, and to control our strategic interceptor forces defending against a bomber attack.

#### (a) Surveillance Systems

Because long-range detection is essential if we are to have timely warning of bomber attacks, we will procure and deploy over-the-horizon backscatter (OTH-B) radars for all-altitude coverage of the eastern, western, and southern approaches to the North American continent. The OTH-B is a high-frequency radar that can detect aircraft from approximately 500 to 1,800 miles away by bouncing a radar beam off the ionosphere.

For northern atmospheric surveillance, we plan to upgrade the Distant Early Warning (DEW) Line extending across Alaska, northern Canada, and Greenland. Replacing these 1950s-vintage radars with more modern equipment will not only reduce operating costs significantly, but will also close gaps in our current radar coverage. The improved DEW Line will consist of new, short-range, unattended radars and upgraded, long-range, minimally attended radars that together will provide all-altitude coverage of the northern bomber approaches to North America. Maintaining the DEW Line improvement schedule is important, as we will reduce support for the aging and obsolescent CADIN-Pinetree radar system in southern Canada starting in FY 1984.

#### (b) Interceptor Forces

Interceptor forces assigned to the North American Aerospace Defense Command (NORAD), along with Tactical Air Command F-15 and F-4 augmentation forces, now maintain ground alert at sites around the periphery of the 48 contiguous states, in Alaska, and in Canada. The Air Force, Navy, and Marine Corps would provide additional interceptors for air defense in a crisis.

We are continuing to modernize our active and reserve interceptor forces by replacing obsolete fighter aircraft. In FY 1982, we completed the first of five scheduled conversions of interceptor squadrons to F-15s. The F-15 will provide our interceptor forces with a long-needed "look-down/shoot-down" capability to detect and engage enemy bombers penetrating at low altitudes and will have sufficient flight range to use information provided by the new OTH-B radar system. Ultimately, F-15 and F-16 aircraft will replace all aging F-106s and F-4s in active and Air National Guard air defense squadrons.

### (c) Airborne Surveillance and Control

Beginning in FY 1985, we propose to buy 12 additional AWACS aircraft for North American air defense at a rate of three aircraft per year. We plan to fly random AWACS surveillance and warning patrols over the coastal and northern approaches to CONUS using our existing AWACS aircraft. This will increase our ability to deter a Soviet bomber attack in the critical years before improved ground-based surveillance systems are fully operational. After all the ground-based radars have been deployed, AWACS would be used to augment and support them. In wartime, it would provide survivable surveillance coverage of bomber approach corridors and would also be used to control interceptor forces defending against bomber attacks. Additional detail on the AWACS program is provided in the $C^3$I chapter.

### (2) Space Defense

We are proposing several programs in FY 1984-88 to improve our ability to monitor space activities and to provide an anti-satellite capability. We are continuing our efforts to complete a worldwide network of five ground-based electro-optical surveillance sensors that will detect and identify deep space objects. We are also planning to modify several existing radars to provide additional high- and low-altitude surveillance coverage, and we are working on data processing improvements to track and target enemy satellites more accurately. Finally, we are investigating advanced technologies that could lead to more capable and survivable surveillance systems in the future.

In conjunction with these surveillance improvements, we are working to achieve an anti-satellite (ASAT) capability. The Air Force plans to deploy the Air-Launched Miniature Vehicle (ALMV), which will be launched by F-15s against enemy satellites. To support an anti-satellite capability beyond this decade, we are currently assessing the feasibility of space-based laser weapons.

### (3) Ballistic Missile Defense

Our extensive work with Ballistic Missile Defense (BMD) components has demonstrated that an active defense could protect some high-value strategic assets from ballistic missile attack. The program is structured, therefore, to sustain our understanding of this technology so that we could field an advanced and highly effective BMD system quickly should the need arise.

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| Air Defense | | | | |
| OTH-B Radar | | | | |
| Development: | | | | |
| $ Millions | 21.7 | 77.1 | 99.1 | 47.2 |
| Procurement: | | | | |
| Quantity | -- | -- | 2 | 3 |
| $ Millions | -- | -- | 176.3 | 247.6 |
| DEW Line Radar | | | | |
| Development: | | | | |
| $ Millions | -- | 8.0 | 31.3 | 29.3 |
| Procurement: | | | | |
| Quantity | -- | -- | 11 | 20 |
| $ Millions | -- | -- | 83.3 | 146.2 |
| Interceptors | | | | |
| Procurement: | | | | |
| Quantity | -- | -- | -- | -- |
| $ Millions | -- | -- | 16.0 | 82.9 |
| AWACS | | | | |
| Procurement: | | | | |
| Quantity | 2 | 2 | -- | 3 |
| $ Millions | 262.1 | 149.5 | 76.2 | 456.9 |
| Space Defense | | | | |
| Development: | | | | |
| $ Millions | 200.9 | 209.5 | 205.6 | 108.3 |
| Procurement: | | | | |
| $ Millions | -- | -- | 19.4 | 196.9 |
| Ballistic Missile Defense | | | | |
| Development: | | | | |
| $ Millions | 462.1 | 519.0 | 709.3 | 1,564.0 |
| Procurement: | | | | |
| $ Millions | -- | -- | -- | -- |

### e. Strategic Command, Control, and Communications

Strategic command, control, and communications ($C^3$) systems are needed to ensure that we could employ our nuclear forces effectively, which is essential for a credible deterrent. We rely upon our strategic $C^3$ systems to warn us of impending ICBM and SLBM attacks and to assess their size and likely objectives. Our $C^3$ systems must be capable of supporting an initial retaliatory response by our forces, both during and after an enemy attack. They must also be able to operate reliably over an extended period following an attack, should that prove necessary. Over the next five years, we are proceeding with several programs that will improve the survivability of our strategic $C^3$ systems. We are also pursuing a comprehensive research and development program to ensure enduring communications connectivity during a nuclear war.

### (1) Missile Warning and Attack Assessment

Survival of the bomber force and important elements of our $C^3$ system depends on high-confidence tactical warning. Some attack characterization information is also needed to support the retaliatory process. To meet these objectives, we are funding programs to improve the survivability, performance, and coverage of the satellites and radars we rely upon to warn us of a Soviet missile attack and to assess its size and scope.

#### (a) Satellite Early Warning System

Early Warning satellites in geostationary orbits would provide initial warning of a missile attack. These satellites use infrared sensors to detect ICBM and SLBM launches. New satellites, scheduled to replace those now on orbit in the mid-to-late 1980s, will incorporate a number of improved features designed to enhance the satellites' performance and survivability.

Warning data from the satellites is transmitted to fixed ground-based processing stations. To reduce our dependence on these vulnerable facilities, we will deploy six mobile ground terminals (MGTs) to receive, process, and disseminate missile-warning data.

#### (b) Ground-Based Radar Surveillance

In addition to our satellite warning systems, we maintain two systems of ground-based radars to provide redundant coverage of Soviet missile launch areas.

The Ballistic Missile Early Warning System (BMEWS) radars at sites in Alaska, Greenland, and Great Britain confirm satellite warning of missile attacks from the north. A secondary role of BMEWS is the satellite tracking support it provides for the Air Force's Space Track program. Upgrades to the Greenland and Great Britain BMEWS radars, scheduled to be completed in FY 1986, will permit more precise estimates of an attack's size and likely targets.

Phased-array radars (PAVE PAWS) deployed along our east and west coasts would confirm satellite warning of an SLBM attack launched from normal Soviet submarine operating areas. We plan to deploy two new PAVE PAWS radars (one each in Georgia and Texas) to provide surveillance of possible SLBM attack corridors to the southeast and southwest of our borders. These four sites, along with the PARCS radar in North Dakota, will complete our planned five-site phased-array radar SLBM warning network, and will allow us to remove the aging FPS-85 and FSS-7 radars.

### (c) Advanced Missile Warning System

Because the survivability of fixed ground-based satellite processing stations and the reliability of satellites following a nuclear attack will always be uncertain, we are funding research on an Advanced Warning System (AWS). Building on technologies now under development, the system would be designed to ensure continued operation throughout a nuclear conflict. Such a system would incorporate more comprehensive on-board data processing so that messages could be transmitted directly to users. The research program is currently structured to support a decision in FY 1987 on whether to proceed to full-scale development. A favorable decision at that time could lead to initial deployment of the system in the 1990s.

### (d) Integrated Operational Nuclear Detonation Detection System (IONDS)

To improve our ability to detect, locate, examine, and report nuclear detonations worldwide, we are developing improved nuclear detonation (NUDET) detection sensors. Some of these new sensors (IONDS) will be installed on the satellites of the NAVSTAR/Global Positioning System (GPS) to expand coverage and increase system survivability and endurance. The system will become fully operational upon deployment of the full constellation of 18 NAVSTAR/GPS satellites. IONDS will contribute to nuclear test ban monitoring and intelligence collection in peacetime, and would provide damage and strike assessment information during a nuclear war. It would identify the location of impacting enemy warheads, thereby assisting the National Command Authorities (NCA) in selecting an appropriate U.S. response.

### (2) Command Centers

We need strategic command centers that will survive a nuclear attack and continue to support decision-making and control of our strategic forces. Over the next five years, we will continue several important programs that will increase the endurance of our airborne command centers and provide new mobile command centers to supplement them.

### (a) Airborne Command Centers

We will complete deployment of four E-4B airborne command posts by FY 1985 to meet the requirements of the NCA/JCS National Emergency Airborne Command Post mission. The E-4B is a modified Boeing 747 aircraft that has been hardened against the effects of nuclear detonations, including electromagnetic pulse (EMP). It is outfitted with high-powered, jam-resistant, very low frequency (VLF) and low frequency (LF) communciations equipment and with super high frequency (SHF) satellite communications equipment to provide reliable and survivable communications with our forces. We also will provide the E-4Bs with an automatic data processing capability to support force management and with more survivable satellite connectivity to ensure that the NCA can receive and transmit information promptly.

We are also upgrading the EC-135 airborne command posts that serve the Commander-in-Chief, Strategic Air Command (CINCSAC) and other nuclear force commanders. The EC-135 modification program includes EMP hardening and upgrading mission-critical $C^3$ systems.

### (b) Mobile Command Centers

We believe that the E-4B and the upgraded EC-135 airborne command posts will greatly improve our capability to retaliate effectively during the early phase of a nuclear conflict. We are concerned, however, about their ability to operate beyond the initial stages of a nuclear conflict. We therefore plan to develop and deploy mobile command centers (MCCs) that could supplement or take over the key functions of our airborne command posts if they could no longer operate effectively.

### (3) Communications Systems

Effective control of our strategic nuclear forces depends upon survivable communications links. Our ICBM, SLBM, and bomber forces must be assured of receiving emergency action messages from the NCA both during and after a nuclear attack. Our FY 1984-88 program will reduce the vulnerability of our strategic communications systems to physical attack, jamming, and nuclear effects. The C$^3$I chapter includes a discussion of our strategic communications systems, funding for which is included in the following table.

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| Strategic Surveillance and Warning | | | | |
| Development: $ Millions | 252.5 | 293.4 | 310.8 | 266.0 |
| Procurement: $ Millions | 369.2 | 585.2 | 524.2 | 175.3 |
| Strategic Command Centers | | | | |
| Development: $ Millions | 112.9 | 150.4 | 225.5 | 212.0 |
| Procurement: $ Millions | 110.9 | 68.3 | 105.0 | 171.2 |
| Strategic Communications | | | | |
| Development: $ Millions | 276.5 | 417.1 | 691.1 | 696.7 |
| Procurement: $ Millions | 43.9 | 87.8 | 280.2 | 512.5 |

## 3. FY 1984-88 Programs for Non-Strategic Nuclear Forces

The most important objective of our non-strategic nuclear force modernization program is the deployment of 464 ground-launched cruise missiles (GLCMs) and 108 Pershing II operational missiles on launchers in Europe. We have also placed high priority on upgrading our stockpiles of nuclear artillery, short-range missiles, bombs, and sea-based weapons. In conjunction with these modernization programs, we are funding programs to improve the command, control, communications, and intelligence ($C^3I$) systems that support our non-strategic nuclear forces. Finally, we continue to seek improvements in the safety, security, and survivability of our nuclear warheads and delivery systems.

### a. Longer-Range INF Missiles

NATO's current non-strategic nuclear arsenal contains no land-based longer-range INF (LRINF) missiles. The Soviet Union, on the other hand, has been engaged since 1977 in a significant buildup of its LRINF arsenal with deployments of the MIRVed SS-20 ballistic missile. The Soviets have now deployed over 300 of these missiles, the majority of which are located in bases from which they could attack targets throughout Western Europe.

The Soviet buildup led to concern throughout the NATO alliance that a perceived gap had been created in NATO's spectrum of nuclear deterrence. The fear was that the Soviets might believe -- however incorrectly -- that they could conduct or threaten limited strikes against Western Europe from a sanctuary in the Soviet Union, on the assumption that, without strong theater-based systems capable of reaching Soviet territory, and given the loss of U.S. strategic superiority, NATO lacked an appropriate means of response. The December 1979 Alliance decision authorizing deployment of the Pershing II and GLCM, in concert with arms control initiatives, represented NATO's effort to redress this imbalance.

During 1983, we will complete development of both Pershing II and GLCM. The United States is moving ahead with plans to deploy these systems in Europe beginning at the end of this year because the Soviets have not yet agreed to our proposal to ban all U.S. and Soviet nuclear missile systems of this range. The Pershing II ballistic missile, a follow-on to the shorter-range Pershing IA now deployed in Europe, has a range of 1,800 kilometers (km). GLCM has an operational design range of 2,500 km.

The deployment of a mixed ballistic missile/cruise missile force will provide the flexibility to select the best weapon for a given mission while hedging against the unexpected neutralization of either system, thus greatly complicating enemy planning. By virtue of their high accuracy, both Pershing II and GLCM will provide an effective capability to attack hard targets while limiting collateral damage. In addition, each system has distinctive characteristics that complement those of the other. Pershing II offers a high assurance of penetrating future Soviet defenses, has the capability to strike time-urgent targets, and takes advantage of the existing Pershing IA infrastructure. GLCM's longer range will allow it to attack deeper targets and to be based farther rearward, thereby increasing its pre-launch survivability and offering an opportunity for broader participation among the allies by hosting U.S. deployments on their soil.

Deployment of Pershing II and GLCM will also permit greater flexibility in the employment of dual-capable aircraft, thus improving NATO's conventional warfighting capabilities. Moreover, by increasing NATO's capability to destroy fixed targets, the Pershing II and GLCM deployments will substantially enhance the credibility of NATO's nuclear deterrent.

Basing preparations are proceeding on schedule, consistent with Alliance plans to begin LRINF deployments in late 1983. Construction of GLCM bases is under way in the United Kingdom and Italy, and preliminary GLCM basing preparations have begun in the Federal Republic of Germany. Since the new Pershing II missiles will replace existing Pershing IAs deployed with U.S. units stationed in Germany, no new base construction will be required for them. Consistent with its September 1980 commitment to support fully both the arms control and modernization parts of NATO's December 1979 decision, the Belgian Government is proceeding with the basing preparations necessary to meet NATO's deployment schedule should the INF arms control negotiations fail to produce concrete results. With regard to the Netherlands, we are engaged in bilateral discussions with the Dutch government on GLCM basing preparations in that country.

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| Pershing II | | | | |
| Development: | | | | |
| $ Millions | 150.6 | 111.0 | 22.8 | -- |
| Procurement: | | | | |
| Quantity | 21 | 91 | 95 | 104 |
| $ Millions | 219.3 | 478.6 | 434.6 | 447.3 |
| GLCM | | | | |
| Development: | | | | |
| $ Millions | 80.1 | 28.6 | 36.5 | 13.2 |
| Procurement: | | | | |
| Quantity | 54 | 110 | 120 | 120 |
| $ Millions | 350.5 | 525.4 | 616.7 | 543.6 |

NOTE: Costs exclude Department of Energy funding.

b. Shorter-Range INF Missiles

The Pershing IA ballistic missile, deployed by U.S. and West German forces, is the only shorter-range INF missile currently in NATO's inventory. During FY 1983, we will begin to retire our Pershing IA force, replacing the missiles on a one-for-one basis with new, longer-range Pershing IIs.

c. INF Aircraft

NATO's current INF aircraft inventory consists of Vulcan bombers and dual-capable F-111, F-16, F-4, F-104, Tornado, Buccaneer, and Jaguar fighter-bombers. As part of an ongoing modernization program, NATO will continue to replace older dual-capable aircraft in its inventory with more modern F-16 and Tornado fighter-bombers. In conjunction with NATO's aircraft modernization program, we are continuing to upgrade our tactical bomb stockpile by deploying new bombs with improved military characteristics and enhanced safety and security features.

## d. Short-Range Nuclear Forces

Short-range nuclear weapons in NATO's current arsenal include 8-inch and 155mm artillery-fired atomic projectiles (AFAPs) and two types of surface-to-surface missiles, Lance and Honest John. (The Honest John has been replaced by Lance missiles in U.S. units but continues to be deployed in some non-U.S. NATO units.) These forces are designed to provide direct support to ground combat units on the battlefield, while complementing other strike systems for shallow interdiction missions.

Over the next five years, we will continue several programs to improve the capabilities of our short-range nuclear forces. We have programmed funds to continue production of a new 8-inch artillery round, the W79, as a replacement for our aging stock of W33s. The new round incorporates an enhanced radiation (ER) warhead and offers significant improvements over the W33 in range, accuracy, and security.

Eventual retirement of the current stockpile of 8-inch W33 rounds will permit recovery of highly enriched uranium (oralloy) for use in modernizing our nuclear forces.

We are also continuing development of a new 155mm artillery projectile, the W82, to replace the aging W48. The W82 uses a modular concept that permits field configuration with a rocket motor, which will add six kilometers to its 24-kilometer basic range.

| | FY 1982 Actual Funding | FY 1983 Planned Funding | FY 1984 Proposed Funding | FY 1985 Proposed for Authorization |
|---|---|---|---|---|
| 8-Inch AFAP | | | | |
| Development: $ Millions | 0.3 | 0.0 | 0.0 | 0.0 |
| Procurement: $ Millions | 16.1 | 14.4 | 29.1 | 6.5 |
| 155mm AFAP | | | | |
| Development: $ Millions | 31.7 | 27.4 | 23.7 | 18.0 |
| Procurement: $ Millions | 0.0 | 0.0 | 63.1 | 64.7 |

Note: Costs exclude Department of Energy funding.

In addition to our AFAP modernization programs, we will complete the production of an ER-capable Lance warhead (W70-3).

All ER weapons are being stockpiled solely on U.S. territory, not dispersed or deployed outside it. Any decision to deploy them would be taken only after close consultation with any country on whose territory they would be based, and then only with the explicit approval of the President.

## e. Land-Based Defensive Systems

Land-based defensive nuclear forces currently in NATO's inventory include the Nike-Hercules air defense system and atomic demolition munitions (ADMs). We are replacing U.S. nuclear-armed Nike-Hercules missiles with Patriot conventional air defense missiles.

## f. Sea-Based Systems

NATO's current long-range sea-based nuclear forces include U.K. Polaris and U.S. Poseidon submarine-launched ballistic missiles (SLBMs) and U.S. carrier-based aircraft. (France also deploys ballistic missile submarines (SSBN), but these forces are not committed to NATO.) The United Kingdom plans to modernize its SLBM force in the 1990s by replacing its four Polaris-carrying SSBNs with a force of either four or five new British SSBNs carrying Trident II missiles.

Our sea-based systems also include a variety of shorter-range anti-air, anti-submarine, and anti-surface ship weapons, such as Terrier surface-to-air missiles, ASROC and SUBROC anti-submarine rockets, air-delivered nuclear depth bombs, and carrier-based tactical bombs. A nuclear warhead for the SM-2 surface-to-air missile is under development, with initial deployment scheduled for the late 1980s. For the longer term, we are also examining the feasibility of enhancing the new Anti-Submarine Warfare Stand-Off Weapon for submarine launch and the Vertical Launch Anti-Submarine Rocket for surface ship launch. These new weapons will provide a modern capability for our submarines and surface ships, enabling them to counter the enemy air threat more effectively and to attack enemy submarines from longer ranges.

Our sea-based nuclear forces for land attack, in conjunction with our land-based nuclear forces, support our policy objective of denying the Soviets the ability to limit a nuclear war to the sea.

## g. $C^3I$ Systems

We continue to seek improvements in the security, reliability, and capability of the command, control, communications, and intelligence systems that support our non-strategic nuclear forces. By the end of the program period, we will have deployed two new communications networks for our forces. By the end of FY 1983, a new system of ultra-high frequency (UHF) satellite communications terminals with secure teletype will be in place, providing a dual transmission route for emergency action messages to our non-strategic nuclear forces (including Pershing and GLCM). By the end of FY 1988, a network of modern, survivable high frequency (HF) radios for our forces in Europe will also be fully operational. The network will incorporate jam-resistant features and will also be hardened against the effects of electromagnetic pulse to improve its survivability in a nuclear war.

## h. Safety, Security, and Survivability

The safety, security, and survivability of our non-strategic nuclear forces are key elements of our modernization program. We are continuing to make our nuclear systems more survivable in combat by increasing their hardness, mobility, and dispersion and by reducing their vulnerability to detection. We are also taking steps to protect our nuclear weapons from seizure by enemy forces, terrorists, or other subversive organizations. Additionally, we are working closely with the Department of Energy to make our nuclear systems safer and more secure by using insensitive high explosives, improved permissive action links, enhanced electrical features, and nonviolent command disable systems.

## 4. Conclusions

A credible and stable deterrent is the essence of our nuclear security. Our adversaries must know that we are capable of immediate and effective retaliation after any type of attack. Our nuclear modernization programs will provide us that security. Improvements being made today are already enhancing our retaliatory posture. As our modernization plans are realized, our retaliatory posture, on which the credibility of our deterrent depends, will continue to be strong.

The deployment of nuclear cruise missiles, the Trident I missile, and Trident submarines, and modernization of the tanker force are already strengthening our existing strategic nuclear deterrent with visibly improved capabilities. Command, control and communications improvements are raising the confidence with which we, and the respect with which our adversaries, view our ability to control nuclear forces.

The planned construction of a modern ICBM force, the deployment of new penetrating bombers, and the development and deployment of more powerful and accurate weapons for survivable sea-based forces will give our triad of strategic nuclear forces the robust capability they need to continue as a credible deterrent into the coming decade. Continued improvements in our strategic communications systems and defenses will bolster the inherent survivability of our forces, thereby increasing our confidence in our ability to retaliate after any form of attack.

Our FY 1984-88 program also makes great strides in modernizing and enhancing non-strategic nuclear forces. Unless an INF arms control agreement is reached in the interim, our programmed force of GLCMs and Pershing IIs will be fully deployed by the end of the decade. Likewise, we will have completed production of the new 8-inch artillery round and new Lance warhead. Deployment of F-16 and Tornado aircraft will have been under way for years; and the nuclear SM-2 will be entering the force. Both of the new communication nets will be in place, thus improving communications with non-strategic nuclear forces, and our new systems will incorporate improved safety, security, and survivability features.

## H. DETERRENCE OF CHEMICAL WARFARE

### 1. Introduction

Our goal is to eliminate the threat of this particularly abhorrent form of warfare by obtaining a complete and verifiable ban on chemical weapons. The United States will not be the first to use chemical weapons and does not and will not possess biological or toxin weapons. We remain committed to long-standing U.S. policy and existing treaties. However, while seeking a verifiable ban, we must be in a position to deter the use of chemical warfare against us or our allies.

The Soviet Union possesses a considerable advantage in chemical warfare (CW) capabilities that could be a decisive factor in some future conflict. In the face of this threat, we have been working to improve our protective posture. While we have recently made significant improvements in training, we still face serious deficiencies in both the quality and the quantity of our defensive equipment. Furthermore, our retaliatory capability remains inadequate since our current stockpile is composed largely of weapons and chemical agents with little or no military utility on the modern battlefield. Efforts to achieve bilateral arms control agreements between 1977 and 1980 were unsuccessful in spite of U.S. unilateral restraint since 1969. Current efforts to obtain a verifiable ban are centered in the multilateral Committee on Disarmament at Geneva, where increased pressure can be exerted on the Soviet position on verification. Achieving a ban will not come easily, not only because the verification and compliance problems are so formidable, but also because the Soviets have little incentive to negotiate seriously so long as they perceive they have a significant advantage in CW capabilities.

Until we can achieve a verifiable ban, we must reduce the Soviet Union's incentive to use chemical weapons against us or our allies by rebuilding and maintaining an adequate CW posture of our own. Our program is structured and sized to do this and no more. Consequently, most of the resources in this program are devoted to improving the ability of our forces to survive and operate under chemical attack. Our goal is to be able to sustain combat operations in a chemical conflict while minimizing the performance decrement associated with operating in a protective posture. However, significant degradation is unavoidable. Therefore, improving our protective posture will not by itself provide an adequate deterrent because the Soviet Union would enjoy a significant military advantage if they could force us to operate in protective equipment in a contaminated environment while their troops remained relatively unencumbered. To complete our deterrent posture, we must eliminate the prospects for such a Soviet advantage by reestablishing a retaliatory capability sufficient to make them recognize that they, too, would be forced to operate with similar encumbrances.

In addition to improving our protective posture and reestablishing a credible retaliatory capability, our program includes plans for the disposal of obsolete stocks of chemical agents and munitions under safe conditions.

The overall direction for our CW program is provided by the Assistant to the Secretary of Defense for Atomic Energy. The Army is the executive agent for research and development, with each Service responsible for procurement, training, and Service-unique development.

## 2. FY 1984-88 Programs

### a. CW Protection

As we move toward our goal of improving CW protection, increased emphasis in RDT&E will be placed in the medical area and upon elimination of deficiencies in current items of protection and warning. Throughout the mid-range period, development of doctrine appropriate to the chemical battlefield and use of field exercises will complement increased training activities. In FY 1984 we will continue to procure stocks of protective clothing for all forces and expand procurement of collective protection systems for all Services.

### b. CW Retaliatory Capability

We will continue to seek Congressional approval to reestablish a credible retaliatory capability. Our proposed program is a small but critical component of our overall approach to redressing critical deficiencies and ensuring that the Soviets have no incentive to use chemical weapons against us or our allies. A chemical retaliatory capability, in conjunction with a strong protective posture, is essential. The current stockpile is clearly inadequate to provide a credible deterrent. Only a very small portion of the stockpile offers potential military utility into the 1980s. Moreover, there is serious concern about the future reliability of even this small portion due to internal munition and agent deterioration in many of the munitions. We will continue our maintenance program to attempt to preserve the serviceability of these munitions. Maintenance alone cannot, however, overcome the deficiencies of the current stockpile, nor can it provide an effective deep-target capability in the absence of the appropriate weapons. Maintenance cannot ease the logistical burdens or reverse or halt internal degradation of munitions. The program we propose would replace the current, inadequate chemical munitions stockpile with one that is more militarily effective, safer and, at the same time, substantially smaller. Our plans are to begin production of binary munitions with FY 1984 funds, which will result in initial assembly of 155mm projectiles in late 1985 and of air-deliverable Bigeye bombs in FY 1986.

### c. Demilitarization

In recognition of the magnitude of the national problem of chemical weapons demilitarization, increased DoD-level management control will be exercised. The program will seek to dispose of those munitions that safety dictates should be eliminated first. FY 1984 funds are requested for a facility to dispose of the incapacitating and highly flammable agent BZ. A facility to dispose of the stocks on Johnston Island and facilities to destroy the rockets and mines at all other storage sites are planned. These facilities will enable us to destroy all M55 rockets and M23 mines (the most potentially hazardous items) by 1990. In parallel with these efforts, we will pursue a research and development program to identify the most cost-effective method of disposing of the remaining, less time-urgent items in the stockpile.

## 3. Conclusion

Improvement of the U.S. chemical deterrent posture is essential both to eliminate the Soviet Union's current incentive to use chemical weapons and to provide an incentive for them to negotiate seriously a comprehensive, verifiable chemical weapon ban. Both the protective and retaliatory components of our program are essential. The Soviet Union has made massive investments in chemical warfare capabilities. The current extreme imbalance in capabilities between us and the Soviets could have catastrophic consequences. We need not attempt to match the Soviet Union across the board in chemical warfare capabilities; this is a highly leveraged area in which our investments in a balanced program, consisting of both protective and retaliatory elements, will have a high payoff in restoring an adequate level of deterrence. Production of binary munitions will not add to the demilitarization problem, since the chemical agent would not be produced until after the munition had been launched toward its target. Further, binary munitions offer substantial safety and maintainability advantages over unitary chemical munitions. However, continued failure to improve our retaliatory posture will perpetuate and aggravate the current high-risk situation and probably thwart attempts to achieve a complete, verifiable ban on chemical weapons. Therefore, we request Congressional support in approving and funding these essential programs.

# I. COMMAND, CONTROL, COMMUNICATIONS, AND INTELLIGENCE ($C^3I$)

## 1. Introduction

### a. Dependence of Force Capability on $C^3I$

The $C^3I$ systems associated with our various nuclear and conventional forces are an integral part of our defense structure and contribute to both deterrence and warfighting capability. The central feature of any $C^3I$ system is the human decisionmakers -- the commanders plus their various staffs and others. These decisionmakers operate within a framework of established doctrine, strategies, tactics, and procedures, supported by an array of sensors, computers, communication links, command facilities, and other equipment. Through these interlinked $C^3I$ systems, our command authorities seek in both peace and war to accomplish military missions directed by civilian authorities. Force capability is inextricably related to the quality of $C^3I$ components and to the manner in which they are integrated with associated weapon systems and decisionmakers.

### b. Continued Management Initiatives

The variety and complexity of our $C^3I$ systems present us with an extremely challenging management task. In responding to this challenge, we have continued to emphasize a number of initiatives that are improving our ability to manage, procure, and operate our $C^3I$ systems.

-- We are emphasizing a total integrated weapon/$C^3I$ system approach to the development, acquisition, and operation of $C^3I$ systems. We believe this approach will ensure the best return for our defense expenditures. In particular, we are reviewing our end-to-end functional requirements for each military mission area to determine the proper mix of weapon systems and $C^3I$ systems. These reviews have provided us with the framework necessary to plan and direct a balanced development and acquisition program.

-- To meet changing threats and mission requirements, weapon systems and force structures necessarily evolve over time along with strategy, operational concepts, tactics, and the decisionmakers' needs for different types of information. Taking note of this, we are developing and acquiring sensor systems, computers, communications systems, and command facilities in an evolutionary manner. At the same time, we keep our planning horizon extended over a 15-year period to ensure architectural stability, cohesiveness, and affordability.

-- The central command and control role played by decisionmakers establishes the need to build each $C^3I$ system around their requirements. To this end, we are emphasizing the greater use of testbeds plus the active involvement of the operational communities in a continual effort to refine $C^3I$ interface requirements and system specifications in support of our evolutionary acquisition strategy.

- We are placing particular emphasis on improving the endurance of the $C^3I$ systems that support our strategic nuclear, non-strategic nuclear, and conventional forces. $C^3I$ systems must not merely survive, but must remain capable of performing their basic functions in both lethal and electronic warfare environments. By the same token, $C^3I$ systems should not degrade the survivability and endurance of associated forces and weapon systems.
- We are continuing to stress $C^3I$ system interoperability, both among our own Services and with our allies, in joint and combined military operations.
- Lastly, we are continuing to stress greater involvement of the Joint Chiefs of Staff and the Defense Intelligence Agency in long-range planning for intelligence and $C^2$ capabilities to support the Unified and Specified Commands and in reviewing Service and Defense Agency programs to ensure that investments respond to Unified and Specified Command requirements.

### 2. FY 1984-88 Programs

Emphasizing a total weapon/$C^3I$ system approach to our development and acquisition activities has afforded us the opportunity to focus our efforts in the following functional areas:

- Strategic and non-strategic nuclear force management,
- Theater and tactical force management,
- Electronic warfare and air defense suppression,
- Defense-wide information and communication, and
- Intelligence programs.

Each of these functional areas, illustrated in Chart III.I.1, has received considerable attention over the past year as part of our defense program. At the top of the chart are the two principal force areas making up our operational defense capability -- our strategic/non-strategic nuclear forces and our general purpose theater and tactical forces. Associated with each of these forces are $C^3I$ systems tailored to meet their specific needs. Providing a foundation for these more specific $C^3I$ systems are those common elements shown at the bottom of the figure. Each of these program areas makes essential and complementary contributions to our overall defense capability, and we are requesting $31.5 billion to fund them in FY 1984.

The following sections of this chapter discuss each functional area and the significant accomplishments achieved over the past year, with particular attention paid to those $C^3I$ systems that support cross-mission or cross-Service needs.

Chart III.I.1

## C$^3$I MISSION AREA STRUCTURE

**STRATEGIC & NON-STRATEGIC NUCLEAR FORCE MANAGEMENT**

- Surveillance and Warning
- Communications Connectivity
- Command and Control Elements

**THEATER AND TACTICAL FORCE MANAGEMENT**

- Information Collection
- Information Distribution
- Command and Control Elements

**DEFENSE-WIDE INFORMATION AND COMMUNICATIONS SYSTEMS**

- Navigation and Location Systems
- Common-User Communications
- Information Systems
- Communications Security

**ELECTRONIC WARFARE AND C$^3$ COUNTERMEASURES SYSTEMS**

- Defense Electronic Countermeasures
- Mutual Support Electronic Countermeasures
- Destructive Countermeasures
- Threat Warning
- Communications Jamming
- Offensive Electronic Warfare

**DEFENSE INTELLIGENCE**

- National Foreign Intelligence Program
- Tactical Intelligence and Related Activities
- Intelligence Oversight

### a. Strategic and Non-Strategic Nuclear Force Management

Over the past year, we have continued to support the President's plan for redressing the relative imbalance between U.S. and Soviet strategic and non-strategic nuclear forces. Specifically, within the $C^3I$ area, we are developing a balanced program of force management improvements. These improvements are based on specific management initiatives adopted and continued over the past year. As an example, we provided the Congress with a North American Air Defense Master Plan in March 1982. This plan, approved in principle by Canadian authorities, describes our program for improving the defense of North America against the bomber and air-breathing missile threat. Within this program, we have integrated a number of surveillance programs to provide comprehensive coverage around our continental perimeter. The plan also relates our $C^3I$ capabilities to the F-15/F-16 fighter aircraft being deployed in support of North American air defense.

Specific improvements to our strategic and theater nuclear force management capability are taking place in the areas of surveillance and warning, connectivity of our nuclear forces, and command and control elements. Surveillance and warning improvements were described earlier in the Nuclear Forces chapter discussion of the Satellite Early Warning System, Integrated Operational NUDET Detection System (IONDS), Advanced Warning System (AWS), Ballistic Missile Early Warning System (BMEWS), PAVE PAWS Radar System, Improved Distant Early Warning (DEW) Line Radar System, and the Over-the-Horizon-Backscatter (OTH-B) Radar System. The same chapter described our strategic command and control improvements -- the Mobile Command Center and E-4B conversion programs. Communications programs for support of the nuclear forces form an important segment of the larger matrix of DoD commmunications networks and systems and are described below.

#### (1) Command and Control Communications

#### (a) Satellite Communications Systems

In FY 1983, the Air Force Satellite Communications (AFSATCOM) system will become fully operational. This system is designed to provide reliable, one-way, ultra-high frequency (UHF) communications channels for the transmission of retaliatory orders from the National Command Authorities (NCA) to our strategic forces, and two-way teletype communications for strategic force management.

AFSATCOM transponders are carried on various host satellites, including the Navy's FLEETSATCOM (FLTSAT) system and Defense Satellite Communication System (DSCS) III satellites. DSCS III will also provide survivable relay links for transmitting processed missile attack warning data from the satellites' early warning system to senior military authorities.

Effective continuous control of our forces, however, requires two-way, jam-resistant communications between our commanders and their forces. MILSTAR, a new satellite communications system with extremely high frequency (EHF) communications channels, will incorporate a significant number of survivability features and provide for prompt one-way message transmissions. As an interim measure, FLTSAT will carry an EHF package to support development, test, and evaluation of MILSTAR user terminal equipment.

### (b) Ground Wave Emergency Network (GWEN)

The GWEN program is designed to connect the National Command Authorities to all major CONUS commanders. In addition, GWEN will link together the North America Aerospace Defense Command (NORAD), Strategic Air Command (SAC) Headquarters, the strategic bomber forces, ICBM launch control centers, and critical surveillance and warning centers. The distributed nature of GWEN will provide a high degree of communications redundancy, thus significantly lessening its sensitivity to the direct and collateral effects of a nuclear attack. Operating in the low frequency communications band, a majority of the GWEN terminals will have a relay-only capability while our major command elements will be capable of transmitting and receiving data messages. In 1982, we awarded a contract for the Initial Communications Connectivity (ICC) program to test the overall feasibility of GWEN. We expect to expand the system through the Thin-Line Communications Connectivity (TLCC) program. Full operational capability is expected in the late 1980s and will include at least 300 relay sites.

### (2) Force Communications

### (a) Strategic Bomber Communications

The Strategic Bomber Communications Program is designed to upgrade both terrestrial and airborne communications to our B-52 force. The addition of low frequency (LF) radio receivers will improve our capability for positive control of this weapon system. Research and development of a miniature LF receiver is presently under way, along with the development of the EHF terminals, as part of the MILSTAR program (discussed later in this chapter). In addition, we are improving our terrestrial communications connectivity through the development and installation of Ground Wave Emergency Network (GWEN) terminals at Air Force Wing Command Posts. These terminals will complement the other systems to assure positive launch control of our strategic bomber force.

### (b) Extremely Low Frequency (ELF) Communications

Existing communication links to the strategic submarine force require deployment of an antenna at or close to the ocean surface. This constrains the operating depth and speed of the submarines. To provide the submarine force with greater operational flexibility and minimize the possibility of detection, we are deploying a dual-site ELF transmission system. One site will result from conversion of the existing Wisconsin Test Facility to an operational configuration. The other will be centered at K.I. Sawyer Air Force Base in the upper Michigan peninsula and will operate in electrical synchronism with the Wisconsin site for enhanced coverage of submarine operating areas. These systems will provide a highly reliable and jam-resistant means for transmitting brief operational messages to the submarine force.

### (c) TACAMO/EC-X Aircraft

Airborne communications relay via the TACAMO aircraft provides the only survivable command link to our ballistic missile submarine (SSBN) force. The TACAMO/EC-X program is designed to provide our SSBN force with improved and enduring communications connectivity. Consisting of modifications and procurement of a replacement aircraft for the TACAMO mission, this program will assure positive control over the SSBN force well into the next century. The program will eliminate current TACAMO aircraft weight restrictions, allow for $C^3$ suite upgrades, improve survivability through electromagnetic pulse (EMP) hardening, extend the range and speed of the TACAMO aircraft, and extend mission performance through an air refueling capability. During the past year, development and acquisition progress was continued through the solicitation and receipt of proposals for the new TACAMO/EC-X aircraft.

### (d) Non-Strategic Nuclear Force Communications

Two programs designed to provide our land-based, non-strategic nuclear forces with improved communications connectivity were also emphasized in our $C^3I$ program over the past year. In one area, production, training, and logistics support activities continued for a system of UHF teletype communications terminals. This satellite communications system will link the headquarters of our European Command with its deployed nuclear forces, thus providing a dual transmission route for emergency action messages. Initial fielding and operational testing of the equipment is expected to occur this year. In a second area, we are supplementing European theater nuclear force communications with reliable, secure, and jam-resistant HF equipment that is hardened against electromagnetic pulse effects to improve survivability. During FY 1982, we began the acquisition process for this network and expect selection of a contractor design in FY 1983. The development of a standard jam-resistant waveform will permit the equipment to interoperate with other HF radios.

### b. Theater and Tactical Force Management

We have also continued to improve our combat management capabilities for the conventional forces. Initiatives in this area are designed to improve information collection and distribution capabilities, and command and control elements.

In addition to specific programs for enhancing our tactical $C^3I$ capabilities, we are continuing efforts to coordinate our various improvement programs. An example is our participation in the NATO Air Command and Control System (ACCS) program. The ACCS program is designed to integrate all NATO air $C^3$ components into a single, effective airspace management system over the next 15 years. As part of this effort, we have established the European Theater Air Command and Control Study (ETACCS) to coordinate U.S. participation in the ACCS program. The ETACCS team is fully operational and has produced the U.S.-preferred architecture for the ACCS. Under the aegis of the National Security Industrial Association, twelve U.S. firms have participated in a DoD-sponsored effort to examine new $C^3$ concepts for air defense in Europe.

We have taken similar steps to coordinate other areas of our tactical $C^3I$ program on a total weapons/$C^3I$ system basis. Specifically, we conducted a broad study of battlefield surveillance and target acquisition during the past year. As a result of this study, we were able to consolidate two separate Service programs for developing a surveillance and target acquisition radar system (described below). Through this initiative, we expect to field an integrated and interoperable radar system for the Army and the Air Force at a substantial savings in development and acquisition costs. The program will also provide the basis for common development of the Army's Corps Support Weapon System and the Air Force's Conventional Standoff Weapon.

### (1) Improved Information Collection

Over the past year, we continued or initiated a number of programs to provide our tactical commanders with better information for tactical situation assessment, force direction, and other decisions. These programs will provide improvements to both air and ground operations.

### (a) Combat Identification System (CIS)

The CIS program is intended to enhance our effective management of defensive firepower through the improvement of our tactical forces' capability to identify positively (as friend or foe) aircraft, surface naval vessels, and ground combat vehicles, and initiate the attack beyond visual range. The overall approach is to combine inputs from cooperative identification systems, noncooperative identification sensors, and indirect $C^3I$ elements to provide high confidence identification. The development of the Mark XV cooperative identification system to replace the aging Mark XII system is included as part of this effort. Over the past year, we were successful in obtaining the agreement of the United Kingdom and the Federal Republic of Germany to evaluate this new design for an identification system. Additional progress was made in the indirect identification area with the development of a draft NATO Standardization Agreement. Overall, improvement of our identification capability will increase substantially the effectiveness of both our air-to-air and surface-to-air air defense weapons while reducing the risk of fratricide to our own forces.

### (b) E-3A Airborne Warning and Control System (AWACS)

The Air Force E-3A AWACS is a deployable airborne command, control, communications and surveillance platform that performs both tactical and North American air defense missions. Additionally, the capabilities of the E-3A are increasingly being exercised in joint operations for the defense of sea lines of communication. During the past year, the E-3A has actively participated in the tracking of Soviet monitoring aircraft off the eastern coast of the U.S., as well as in surveillance operations in Southwest Asia. This past year has seen the delivery of the 28th E-3A aircraft to the Air Force and the fourth of a planned force of 18 aircraft to NATO. Air Force aircraft 25 through 34 and all 18 of NATO's aircraft will be in a standard configuration which includes a maritime radar, a larger computer, and the Joint Tactical Information Distribution System (JTIDS) (described later). The first 24 Air Force aircraft will be retrofitted with the large computer, JTIDS, and an austere maritime surveillance capability beginning in September 1984. The 34th U.S. and 18th NATO aircraft are expected to be acquired by 1985. Successive system improvements are also in various stages of development, production, or retrofit to existing AWACS aircraft. Additionally, we plan to procure 12 more AWACS, beginning in FY 1985, to supplement surveillance coverage for North American Air Defense.

### (c) E-2C HAWKEYE

The E-2C HAWKEYE is a carrier-based airborne early warning and control aircraft that provides air defense surveillance and mission coordination and control capabilities for the Navy's carrier battle groups. In addition, the E-2C has supported U.S. efforts to control drug-smuggling operations along our southern coast. By the end of 1982, the Navy had taken delivery of its 76th E-2C aircraft. Japan has also acquired four of a planned force of eight aircraft and Israel continues to express interest in acquiring additional E-2Cs. Finally, we are pursuing a number of radar system improvements to enhance, in a progressive manner, the operational capabilities of the E-2C.

### (d) Relocatable Over-the-Horizon Radar (ROTHR)

We have begun a ROTHR program to develop and acquire a relocatable, over-the-horizon surveillance capability for tactical missions which would have less performance capability than the OTH-B radars being deployed at fixed sites for CONUS defense. Primary mission application of the ROTHR would be in support of maritime air defense of the Navy's carrier battle groups and selected sea lanes. Additionally, the ROTHRs could be assigned in support of rapid deployment force operations in remote areas of the world. Finally, the ROTHRs are expected to be the primary wide-area search system for regional air defense operations in critical ocean areas not covered by existing or planned surveillance systems. The initial ROTHRs are planned to become operational in the mid-to-late 1980s.

### (e) TR-1 Reconnaissance Aircraft

The TR-1 is a high-altitude, long-endurance standoff reconnaissance and surveillance platform. This aircraft, a derivative of the existing U-2R, is capable of long loiter at altitudes above 60,000 feet. The TR-1 is designed to carry a variety of sensors for battlefield surveillance. These alternative sensors include the Advanced Synthetic Aperture Radar (ASARS) for surveillance of ground targets and the Precision Location Strike System (PLSS) for the detection, location, and attack of enemy radars. The first TR-1 aircraft was delivered in September 1981, followed by three in FY 1982 and three more expected in FY 1983. For the future, we are considering the TR-1 as one of the airframes for the new Joint Surveillance Target Attack Radar System (described next).

### (f) Joint Surveillance and Target Attack Radar System (Joint STARS)

The Joint STARS program, mentioned earlier in the Land Forces chapter, is intended to provide the Army with a wide-area, moving target surveillance capability, and the Air Force with a full weapons guidance capability. It therefore will add to our battlefield interdiction capability by supporting both overall battle management processes and the execution of standoff interdiction attacks. During 1982, we completed formation of the Joint Program Office and conducted concept definition studies. A full-scale engineering development contract for Joint STARS radar development is expected to be awarded by the middle of 1983.

## (2) Improved Information Distribution

We must not only improve our capability to collect battlefield information, but also assure that it is made available to operational users in a timely and reliable manner. To this end, we have included a number of tactical communications improvements in our current $C^3I$ program.

### (a) Joint Tactical Information Distribution System (JTIDS)

JTIDS is a joint-Service program for distributing high-capacity, secure, and jam-resistant digital information to our tactical air, land, and naval forces. This highly survivable system will provide not only tactical data and limited voice communications, but also limited cooperative identification and relative navigation information to JTIDS-equipped platforms within the JTIDS network. During this past year, the Navy's Distributed Time Division Multiple Access (DTDMA) program entered full-scale development, joining the Air Force/Army Class-2 terminal TDMA program (full-scale development began in 1981) and the Air Force Class-1 terminal program (production started in 1981, with deliveries beginning in July 1982). We expect both the Class-2 TDMA and the DTDMA terminals to reach production decisions in the mid-1980s. These JTIDS terminals, when deployed in the late 1980s and early 1990s, will provide an improved level of communications interoperability to our tactical forces.

### (b) HAVE CLEAR

The HAVE CLEAR program will provide long-term improvements to our tactical airborne communications. Based on our evaluation of the SEEK TALK program, we have modified our approach to providing a high anti-jam voice capability. The HAVE CLEAR program resulted from that evaluation. HAVE CLEAR should provide jam-resistant capability well into the late 1990s.

### (c) HAVE QUICK

The HAVE QUICK program provides nearer-term improvements to our tactical airborne communications. This program modifies existing UHF radios. In FY 1982, we acquired HAVE QUICK units for both the Air Force and the Navy. During FY 1983, we are starting a limited research and development effort to extend the useful life of HAVE QUICK. Also during FY 1983, the Army is acquiring HAVE QUICK units while NATO is expected to ratify related standardization agreements.

### (d) Single Channel Ground and Airborne Radio System (SINCGARS)

The SINCGARS program is designed to provide our tactical forces with a new generation of secure, jam-resistant, and reliable Very High Frequency (VHF) radio communications. Another key objective of the SINCGARS program is the achievement of interoperability with our NATO allies. To this end, we are continuing our efforts to secure related NATO standardization agreements for the SINCGARS equipment. We have accelerated our acquisition of SINCGARS such that production will begin in FY 1983 and tactical units will start to be equipped in FY 1985.

### (e) Tactical HF Communications

Consistent with our improvements to our VHF communications systems, we are pursuing jam-resistance improvements to our tactical HF radios. Interim waveform standards for our current HF radios have been developed and released to our NATO Allies. In addition, we have taken steps to ensure the interoperability of these radios with the earlier-mentioned communications equipment supporting our European non-strategic nuclear forces. For the long term, we have established a tri-Service coordinating group to develop standards for all of our future tactical HF systems.

### (f) Position Location Reporting System (PLRS)

PLRS is a joint Army/Marine Corps program to develop and field an automatic, near-real-time identification and location system for deployed tactical forces. The system will augment conventional communications and enhance our ability to control tactical maneuver units on the battlefield. Over the past year, joint development and operational tests were completed by the Army and Marine Corps, and production decisions were made by both Services. FY 1983 plans call for the award of a production contract plus continued development of test equipment and support packages for initial fielding. Initial fielding of the system is projected for FY 1986. Complementing this program is our development of the more advanced PLRS/-JTIDS hybrid system. Through the application of a preplanned product improvement ($P^3I$) to PLRS, and integration with the JTIDS Class II terminal, fielding of this system in FY 1988 will provide the data communication system linkages between tactical computer-driven weapon and support systems to be fielded in this century.

### (g) Joint Tactical Communications (TRI-TAC)

The TRI-TAC program provides improved, secure digital communications for our tactical forces. The broad program includes multi-channel transmission units, circuit and message switches, control facilities, telephones, data terminals, and communications security equipment. During 1982, we awarded production contracts for the Tropospheric Scatter Radio equipment, the Digital Group Multiplexer, and the modified AN/GRC-144 radio. In FY 1983, we plan to accomplish the initial delivery of large circuit and message switches and to award contracts for several other elements of the TRI-TAC program. Through these efforts, we are moving to assure interoperability among U.S. and NATO forces while at the same time improving tactical communications service and reducing system life-cycle costs.

## (3) Improved Command and Control Elements

Complementing our programs for improved information collection and distribution are several efforts designed to improve the force management process itself.

### (a) Joint Crisis Management Capability (JCMC)

The JCMC program will provide rapidly deployable force management capabilities in those areas of the world where U.S. presence is minimal or nonexistent. The modular system will replace our aging and unreliable crisis management $C^3$ assets with a modernized standard force management system. Through this program, we are assuring responsive communications connectivity and command and control from the crisis area back to the Theater Command or to the National Command Authorities. During 1982, we continued this program through the acquisition and fielding of manpack satellite communications terminals. In the near future, we expect to begin procurement of more extensive airborne/ground $C^3$ equipment for the commanders of the European Command, Pacific Command, Readiness Command, and the Unified Command for Southwest Asia.

### (b) Joint Tactical Fusion (JTF) Program

Our JTF program is an effort to develop and field an automated system to assist processing, analyzing, and disseminating tactical intelligence reports for battle management and execution. We have structured this joint Army/Air Force development program to improve standardization of computer hardware and software, to ensure system interoperability, and to maximize our return on prior Service research and development efforts. In addition, two near-term projects are currently under way to field interim improvements to our tactical intelligence processing capability. A Limited Operational Capability for Europe (LOCE) system, based on earlier JTF testbed work, will support USCINCEUR and his major subordinate commands. Also, the Army's Technical Control and Analysis Center-Division (TCAC-D) will be deployed to provide automated support for signals intelligence control and analysis within the U.S. Army forces. These efforts, coupled with more advanced follow-on fusion systems, form a critical element of our tactical force management capability.

### (c) Joint Interoperability of Tactical Command and Control Systems (JINTACCS)

Our JINTACCS program was established to assure the interoperability and compatibility of the Services' various tactical $C^3I$ systems. Consisting of standardized information-exchange requirements, message formats, and interface procedures, JINTACCS covers a number of functional areas including intelligence, air operations, amphibious operations, fire support operations, and operations control. By FY 1984-85, we expect to have completed compatibility and interoperability testing and operational effectiveness demonstrations for each of the functional areas.

### (d) Modular Control Equipment (MCE) Program

The MCE is a joint effort with the Marine Corps TAOC-85 program to develop modular replacement units for the aging air surveillance and control portions of our Air Force Tactical Air Control System (TACS). The MCE will enhance TACS's survivability, mobility, and ability to handle the greatly increased $C^3$ workloads required in a modern combat environment. In the last year, we awarded a three-year research and development contract for the MCE program.

## c. Electronic Warfare and $C^3$ Countermeasures

Our electronic combat capabilities underlie both strategic and tactical military operations. This broad functional area includes destructive and disruptive operations designed to degrade the enemy's electromagnetic operations while protecting our own. Over the past year, we have placed considerable emphasis on maintaining a technological advantage in this area of rapidly evolving competition.

To integrate our various initiatives in this area, we have undertaken a number of management actions designed to focus attention on the overall electronic combat problem faced by each of our forces. In one effort, the Air Force has developed an Electronic Combat Action Plan to support a balanced acquisition program for both destructive and disruptive assets. As again demonstrated in the Israeli/Lebanon conflict, electronic warfare provides a high-leverage military capability when used in conjunction with anti-radiation weapons. The increased visibility provided to electronic combat needs resulted in a more than 15% funding increase for this area between FY 1983 and FY 1984. In a similar effort, the Air Force, Army, and Readiness Command developed a joint operational concept for command, control, and communications countermeasures. This effort has allowed us to coordinate command and control responsibilities, targeting procedures, and execution procedures for this vital area of operations. Through such efforts, we are formulating the framework needed to coordinate and consolidate, where appropriate, our various electronic combat improvement programs.

Current programs and accomplishments are in the areas of defensive electronic countermeasures, mutual support electronic countermeasures, threat warning systems, destructive countermeasures, communications jamming, and offensive electronic warfare.

### (1) Defensive Electronic Countermeasures

Two types of systems included in our current $C^3I$ program provide for the enhanced survivability of our tactical fighters against enemy air defenses. For our existing ALQ-131 jamming pod, we completed prototype testing of new processing techniques. Incorporation of these improvements in our FY 1983 production will increase the effectiveness of this externally carried countermeasures pod against both air-to-air and surface-to-air radars. Our more advanced Airborne Self-Protection Jammer (ASPJ) system is a joint Air Force/Navy development effort to enhance the combat survivability of the A-6, EA-6B, F-14, F-16, and F/A-18 aircraft (internally mounted), and the AV-8B (podded version).

### (2) Mutual Support Electronic Countermeasures

Mutual support electronic countermeasures provide additional protection to our combat aircraft by complementing self-protection systems such as the AN/ALQ-131 and ASPJ. Two types of mutual support electronic countermeasures aircraft continue to be upgraded as part of our current $C^3I$ program.

The EA-6B carrier-based EW aircraft supports naval aviation strike operations by suppressing a variety of early warning, acquisition, and fire control elements of enemy air defense systems. In addition, the EA-6B contributes to fleet defense by degrading the enemy's anti-ship missile systems. Over the past year, we continued development and testing of a number of system improvements designed to extend the capabilities of the EA-6B into the 1990s.

The Air Force's EF-111A aircraft with its Tactical Jamming System (TJS) supports a number of missions, including barrier surveillance jamming, suppression of surface-to-air missile threats for close air support operations, and escort jamming for deep strike missions. The 388th Electronic Combat Squadron was established in FY 1982 at Mountain Home Air Force Base, and site activation efforts were continued for a second operational location at RAF Upper Heyford, England.

### (3) Threat Warning

Our family of ALR-67, ALR-69, and ALR-74 radar warning receivers (RWRs) is the most important element of a tactical fighter's self-protection system. These systems warn the pilot of impending threats in time to permit the use of a variety of defense options (e.g., jamming, decoys, maneuvering, or suppression of the threat). Accomplishment of this function within a dense signal environment is becoming more difficult as threat radars are technologically improved. In response, we are continuing to make critical improvements to our various RWR systems. We will complete operational evaluation of the Navy's ALR-67 system (installed in the A-6, EA-6B, AV-8B, F-14, and F/A-18) by mid-FY 1983, and have initiated a limited production contract for F-18 installations. We continued production of the Air Force's ALR-69 system (installed in the A-10, F-4E, and F-16) to meet established inventory objectives. We have recently signed a joint Navy/Air Force agreement for tactical electronic warning receivers and expect to establish a joint program office. Our current plan calls for development of a more advanced warning system for deployment by both Services in the 1990s.

### (4) Destructive Countermeasures

To complement the disruptive countermeasures, destructive options are required to help counter enemy acquisition, terminal threat, $C^3$, and jamming systems. Programs in this category include the F-4G WILD WEASEL, which provides a lethal counter to enemy surface-to-air missile systems. Equipping the F-4G Wild Weasel force with the High-Speed Anti-Radiation Missile (HARM) will substantially increase the capability of this lethal system. Additionally, the Precision Location Strike System (PLSS) will provide highly accurate real-time targeting data on enemy emitters, and is capable of directing weapons and strike aircraft against those targets. The Navy and Air Force are jointly pursuing near-term acquisition of a self-protection missile (SIDEARM I) that can be launched from specially equipped aircraft. A follow-on version (SIDEARM II) will subsequently be developed for employment on most tactical aircraft.

### (5) Communications Jamming

Emphasis on a $C^3$CM strategy has resulted in the development of a broader range of electronic warfare systems designed to degrade directly the enemy's communication systems. Three systems currently in development reflect this emphasis. The Navy's ALQ-149 Tactical Airborne Communications Jamming System is targeted against enemy HF/VHF/UHF tactical communication links and will replace the outdated ALQ-92 system. We completed our testing of the advanced development model in FY 1982 and expect to begin full-scale development in mid-FY 1983. For the Air Force, we employed a preplanned product improvement strategy to deliver the EC-130H COMPASS CALL jamming system in a record two years from initial contract. Finally, the Army began system acceptance testing this year for its ALQ-151 QUICK FIX HF intercept and jamming system. Deployed at the division, separate brigade, and armored cavalry regiment levels, the system will be a key element of Army Combat Electronic Warfare Intelligence (CEWI) units.

### (6) Offensive Electronic Warfare

The Soviets continue to field more capable surveillance and targeting sensors which, coupled with deployment of their longer range and more accurate weapons, increases the scope and intensity of the threat to our forces. To counter this evolving threat, area electronic warfare concepts and tactics are being developed. Included in this category are the use of mutually supporting electronic countermeasures to degrade long-range surveillance sensors, decoys to confuse targeting sensors, and emissions control procedures to deny passive detection.

## d. Defense-Wide Information and Communications Systems

Our efforts to improve the capabilities of our defense-wide information and communications systems are focused on four major areas: navigation and location, common-user communications, information systems, and communications security.

### (1) Navigation and Location

A principal component of our program to improve the navigation capabilities of our forces is the NAVSTAR Global Positioning System (GPS). This space-based radio navigation system will provide highly accurate position, velocity, and time information to equipped users anywhere on or near earth. Full-scale development of the space, control, and user equipment segments progressed satisfactorily in FY 1982. In September 1982, we awarded a production contract for long-lead spacecraft components; a full multiyear contract is scheduled to be awarded in FY 1983. This coming year will see the integration of prototype user equipment on a number of test vehicles to support a production decision evaluation phase in FY 1984. Deployment of the 18 satellites that will provide a worldwide three-dimensional capability is expected to be completed in FY 1988.

### (2) Common-User Communications

The Defense Communications System (DCS) provides global telecommunications service to DoD and other users and encompasses a variety of common-user switched systems, long-haul transmission systems, special networks, and associated network technical control systems. Major accomplishments in 1982 included the formulation of a cost-effective DoD commercial satellite communications system (COMSATCOM), as well as improvements in several other communications systems.

#### (a) Defense Satellite Communications System (DSCS)

The first DSCS III satellite with greatly improved jam resistance, electromagnetic pulse hardening, and a more survivable control system was successfully launched in October 1982. The system is designed to serve a wide variety of users.

#### (b) Defense Switched Network (DSN)

The DSN is a telecommunications system providing end-to-end common-user and dedicated telephone service to DoD. Evolving from the existing AUTOVON and other circuit switching projects, the DSN will be extended incrementally as opportunities occur for upgrades and growth. Over the past year, we established the DSN plan and tasked the Defense Communications Agency (DCA) to prepare financial and administrative plans for this system. Over future years, the DSN will provide critical DoD users with enhanced communications security, interconnectivitiy, interoperability, survivability, and economy.

(c) Defense Data Network (DDN)

This past year, we terminated the AUTODIN II program and replaced it with the more survivable and less costly DDN. Formed from existing DoD networks, the DDN is a common-user data communications network providing end-to-end encryption and direct terminal access.

(d) Worldwide Digital System Architecture (WWDSA)

Expanding from our present networks, the WWDSA provides a plan for the evolutionary integration of voice, data, and record communications into an all-digital system. The WWDSA will ultimately combine communications systems that support DoD strategic and tactical, civil, and NATO users into a worldwide digital system. The Joint Chiefs of Staff approved the architecture of this evolutionary project in FY 1982.

(e) MILSTAR

The MILSTAR satellite communications system is designed to provide survivable and enduring command and control communications for those decisionmakers who must be able to direct and receive information from their forces through all levels of conflict, including general nuclear war. Principal users of the system will be the nuclear forces, the Navy, and tactical ground mobile forces of the Army, Marine Corps, and Air Force.

The system definition phase of the MILSTAR program was concluded in September 1982 with the release of a request for proposal for full-scale engineering development of the MILSTAR satellites. MILSTAR terminals are being developed by the Services and will be available coincident with the first launch.

(f) Secure Voice Improvement Program (SVIP)

The SVIP will expand DoD's secure voice capability to approximately 10,000 subscribers over the next several years. The SVIP will share equipment and facilities with the Federal Secure Telephone System, and will be interoperable with other DoD, DCS, civil, and tactical networks. The SVIP terminal development is proceeding on schedule, and work is being accomplished in the areas of interface development, systems architecture, and testing. SVIP conferencing will be available through the Secure Conferencing Project, which was approved for implementation in 1982. To extend the life cycle of the present secure voice system until the SVIP can be fully implemented, the AUTOSEVOCOM Life Cycle Extension Program (ALCEP) was implemented. ALCEP will also meet 700 urgent, long-standing, unfilled secure voice requirements.

(3) Information Systems

Improvements to our Worldwide Military Command and Control System (WWMCCS) and other computer systems are being carried out under several programs. Enhancement of the command and control functions on our Honeywell H-6000-based computer system is the focus of our WWMCCS Information System (WIS) Modernization Program. During the past year, a number of improvements were made to the automated message-handling, unit and joint reporting, and other hardware and software features. The WWMCCS Intercomputer Network (WIN) is an element of the Defense Data Network. Progress this year with the replacement of obsolete switches is moving the WIN toward more reliable and endurable communication service for all network users. We continue to emphasize computer security at our Computer Security Evaluation Center (CSEC), whose functions involve the evaluation of industrial and DoD computer systems and the development of new computer security technology.

### (4) Communications Security (COMSEC)

We are continuing to implement protective measures under our COMSEC program to deny unauthorized persons national security-related information from U.S. telecommunications. As part of this effort, we are applying security technology to our entire spectrum of telecommunications systems to dramatically improve the endurance of our $C^3I$ systems and, by extension, our strategic and tactical forces. Finally, we have taken the lead in the establishment of the government-wide Federal Secure Telephone System (FSTS).

## e. Intelligence Program

The Defense Department intelligence program is designed to respond to military intelligence requirements at the national, departmental, and tactical levels on an across-the-board basis. The collection capabilities of its technical systems enable the DoD to respond to a variety of intelligence needs of other departments and agencies of the Government.

The needs of weapons designers and planners for information concerning situations with which the U.S. must deal in the future require that continuing attention be given to information and analysis that will support mid-term and longer-range planning.

Increased attention is being given to enhancing the support that department-level intelligence resources provide to the operational forces.

Provision of resources for tactical intelligence activities in lower-echelon units of the operational forces is handled through the normal force structure process, but all other DoD intelligence activities are handled in one of two ways, either within the National Foreign Intelligence Program (NFIP) or as Tactical Intelligence and Related Activities (TIARA). Many of the activities within the NFIP and TIARA are highly classified, but a general description can convey the scope of what is involved.

### (1) National Foreign Intelligence Program (NFIP)

Most of the peacetime intelligence activities of the Defense Department are included in the NFIP, and a variety of activities are under way to improve Defense capabilities for collecting, processing, and participating in the production of national intelligence. The Director of Central Intelligence (DCI) is charged by the President with responsibility for providing program guidance and developing the NFIP budget. The activities of DoD's intelligence components account for most of the resources in the NFIP. These activities are budgeted in five NFIP programs:

(a) Consolidated Cryptologic Program (CCP)

The CCP includes the resources of the National Security Agency (NSA) and those cryptologic elements of the Military Services that are under operational direction of the Director, National Security Agency/Chief, Central Security Service, who is program manager for the CCP.

(b) General Defense Intelligence Program (GDIP)

Resources of the Defense Intelligence Agency (DIA) and of those intelligence components of the Military Services devoted to the collection, processing, or production of national intelligence are included in the GDIP, for which the Director, DIA is program manager. Primary focus of DoD intelligence organizations whose funding is provided in the GDIP is on military intelligence of importance to both national and departmental users and to the operational forces.

(c) Special Reconnaissance Activities of the Air Force and the Navy

These two programs, each managed under Service cognizance, are devoted to the collection of special national foreign intelligence through reconnaissance activities. The intelligence acquired is of importance to both national policymakers and the operational forces.

(d) Defense Foreign Counterintelligence Program (DoDFCI)

Counterintelligence activities of the three Military Departments comprise this program. The program manager is in the Office of the Deputy Under Secretary of Defense (Policy). Increasing emphasis is being given to investigations of espionage, to operations against hostile foreign intelligence organizations, and to the provision of support to operational commands.

(2) Tactical Intelligence and Related Activities (TIARA)

TIARA encompasses an array of Service and Defense Agency reconnaissance, surveillance, and target acquisition systems that are acquired and operated outside the NFIP. These systems respond to operational commanders' tasking for time-sensitive information. Included in the TIARA aggregation are the Tactical Cryptologic Program (TCP) and the Defense Reconnaissance Support Program (DRSP).

There were many significant accomplishments by TIARA programs last year. These included satisfaction of both tactical and national intelligence requirements in support of major U.S. and allied exercises during normal military operations and in crises. A key goal of the TIARA concept is to obtain a complete, coherent, and rational management perspective over activities that share the common objective of supplying intelligence information to force commanders.

A major long-term contribution of TIARA management will be to provide a total systems approach to satisfying intelligence requirements of tactical commanders. This will ensure that supportive communications, processing, correlation/fusion, and display capabilities are addressed as part of the complete tactical intelligence system. The intent is to focus on successful operational systems, make cost-effective, near-term improvements in those systems, and plan for the orderly integration of systems now in development.

To assure greater recognition of cross-program considerations, nearly all programs included under the definition of TIARA are now under the cognizance of the Director of Tactical Intelligence Systems in the Office of the Assistant Deputy Under Secretary of Defense (Intelligence). Their TIARA management procedures vary, but each Service and Defense Agency has established separate TIARA offices within its headquarters to work with OSD to ensure that the intelligence needs of the commander are incorporated at the beginning of the requirements process and that related programs are faithfully executed.

We have charged the Joint Chiefs of Staff and the Defense Intelligence Agency to take the lead in ensuring that cross-service, cross-command, cross-program, and international requirements are addressed in the intelligence and related $C^3$ planning during the program reviews.

In the planning area, the Defense Intelligence Agency is moving to become the focus for defense intelligence planning. Additionally, the Agency has established an office to support the National Command Authorities and military commanders in planning for war emergency situations.

### (3) Intelligence Oversight

The Assistant to the Secretary of Defense (Intelligence Oversight) is responsible for the independent oversight of all DoD intelligence and counterintelligence activities to ensure legality and propriety, and reports on such matters to the Deputy Secretary of Defense and the President's Intelligence Oversight Board. He inspects DoD intelligence elements worldwide and monitors inspections of such units by the inspectors general of the Services and Defense Agencies. He also conducts, directs, or monitors investigations of alleged questionable activities within the DoD intelligence community.

## 3. Conclusions

Over the past year, we have continued a number of initiatives aimed at effectively and affordably improving our strategic, tactical, and common-user $C^3I$ systems. Taken together, these initiatives will provide our command authorities with enhanced capabilities for accomplishing assigned military missions in both peace and war. The integral nature of $C^3I$ systems and weapon systems has led us to emphasize the total defense structure in our development, acquisition, and operational activities. Building upon our earlier progress, we have structured our $C^3I$ program to provide evolutionary improvements keyed to specific mission area requirements. Balancing this evolutionary acquisition approach has been our emphasis on long-range (15-year) planning to ensure architectural stability, cohesiveness, and system affordability. Through this approach, we have demonstrated significant progress in providing enhanced $C^3I$ capabilities in our strategic, non-strategic nuclear, and tactical force mission areas. Continuation of this balanced approach is seen as the best means for complementing our evolving force structures with effective, enduring, and interoperable force management capabilities.

## J. MOBILIZATION

### 1. Introduction

The capability of the United States to mobilize its vast economic, industrial, and human resources to augment the active forces in times of national emergency is an essential factor in deterring potential enemies and reassuring U.S. allies. The deterrent value of mobilization resides not only in the military components but also in the convertibility of civilian manpower and production capabilities into military units and industrial warfighting support.

This Administration places great importance on creating a capability to respond with appropriate military measures to a set of geographically dispersed, simultaneous emergencies. Toward this end, we have undertaken numerous initiatives to improve both our DoD and federal mobilization capabilities during the past year. Improving our capabilities to respond militarily to various emergencies is largely a planning activity, with some exercises to test the plans. The small commitment of resources required for these activities has a potentially large payoff in preparedness should actual mobilization be required.

### 2. Federal Mobilization Planning -- The Emergency Mobilization Preparedness Board

Late in 1981, the President established the Emergency Mobilization Preparedness Board (EMPB) as a senior-level interdepartmental organization for the coordination of mobilization planning and guidance. This formalized his commitment to developing a credible and effective capability to harness the mobilization potential of America in support of the armed forces while meeting the needs of the national economy and other civil emergency preparedness requirements. To emphasize the high priority he places on federal mobilization planning, the President designated his Assistant for National Security Affairs as Chairman of the EMPB. DoD is represented by the Under Secretary of Defense for Policy and the Director of the Joint Staff. During this year, the Board prepared and the President approved a National Policy Statement on Emergency Mobilization Preparedness. The EMPB also developed a Plan of Action to improve emergency mobilization preparedness consistent with the approved policy. The EMPB has chartered 12 interdepartmental working groups organized along functional lines to implement the Plan. DoD actively participates in all of these working groups and chairs those on Military Mobilization and Emergency Communications.

#### a. Military Mobilization Working Group

The Assistant Secretary of Defense for Manpower, Reserve Affairs, and Logistics is the chairman of the Military Mobilization Working Group (MMWG), which includes representatives from 10 other federal agencies. The Working Group has developed milestones for the National Plan of Action related to supporting the deployment of forces to theaters of operations, ensuring the availability of resources necessary for military mobilization, and improving military support to civil authorities. The MMWG has also chartered three subworking groups. The Scenario Development Subworking Group has developed a set of contingency scenarios for use in interagency mobilization planning. The MMWG reviewed and approved the scenarios, and they are currently being coordinated by the EMPB among the federal agencies. The Requirements Development Subworking Group has completed a detailed plan of action. The group has identified specific resource categories and assumptions required to articulate shortfalls and is working to identify current shortages for the purpose of projecting mobilization requirements and availabilities. The Health Personnel Legislation Subworking Group has completed legislation in draft form that, if enacted, will enable the Selective Service to conscript health professionals in an emergency should we not be able to get sufficient health professional volunteers to support our forces. The draft legislation is being coordinated with various health professional organizations and should be submitted to the Congress early this year.

### b. Emergency Communications Working Group

The Emergency Communications Working Group (ECWG) was established to ensure communications resources are adequate to respond to the nation's needs across a broad spectrum of emergency mobilization situations. It is chaired by the Director of the Defense Communications Agency, serving in his dual capacity as Manager of the National Communications System. Selected subgroups deal with issues, user needs, emergency preparedness concepts, the planning process, nonelectronic communications, and information processing. The ECWG prepared a coordinated Emergency Communications National Policy Statement on Emergency Mobilization Preparedness and a coordinated Emergency Communications Plan of Action consistent with the National Policy.

## 3. DoD Mobilization Planning

### a. New Mobilization Deputy

Last fall, I established the new position of Deputy Assistant Secretary of Defense for Mobilization Planning and Requirements reporting to my Assistant Secretary for Manpower, Reserve Affairs, and Logistics. Over the past two years, I have increased emphasis on military mobilization planning, conventional force deployment planning, and contingency mission resource requirements. We had made considerable progress in mobilization programs, and relationships within and outside DoD had been strengthened. However, because of the broadening scope and importance of these programs, the increasing interest in mobilization planning at the highest levels of government, and the continuing contacts required with top government officials, I decided a senior official, concentrating wholly on these functions, was necessary.

### b. DoD Master Mobilization Plan

The complexity and magnitude of the mobilization process dictate that sound planning occur at all levels within DoD. The DoD Master Mobilization Plan (MMP) provides broad planning guidance to all DoD agencies and organizations and a framework for making mobilization decisions and managing the mobilization process. The MMP identifies mobilization responsibilities and describes the related tasks to be performed both during peacetime preparation for a crisis and during mobilization.

In June 1982, the MMP was issued as a formal, approved planning document. During the coming year, we will continue to revise the MMP, develop detailed plans for executing various mobilization tasks, identify resources for full mobilization, and initiate force expansion planning for a protracted multitheater conflict.

c. Crisis Management Planning

In the fall of 1980, we conducted a major DoD exercise to test our procedures for mobilization and deployment under the threat of imminent hostilities. The evaluation of that exercise disclosed that the Office of the Secretary of Defense (OSD) lacked the organization and procedures to discharge effectively its management responsibilities under the heightened urgencies of time and complexity in a mobilization crisis.

Since early 1981, we have been developing organizational and procedural mechanisms to enhance OSD's crisis management performance beginning with the basic task of identifying the nature and the responsibility for mobilization management actions. This prototype, termed the OSD Crisis Management Organization (CMO), was tested during Exercise PROUD SABER. We are now analyzing the results of that test to determine what modifications are required to make better use of the capabilities of this organization. We will continue to test and refine the CMO.

d. DoD Mobilization and Deployment Steering Group

Under this Administration, the Department of Defense Mobilization and Deployment Steering Group has been thoroughly revitalized. The principal functions of this group are to provide mobilization policy and planning guidance, to coordinate mobilization planning programs, and to identify and resolve mobilization planning issues. The group is chaired by the Under Secretary of Defense for Policy, and is composed of senior representatives from the Office of the Secretary of Defense, the Military Departments, and the Organization of the Joint Chiefs of Staff. The Steering Group has initiated a major mobilization force expansion planning effort. This type of planning is vital to our ability to mobilize effectively for an extended conventional conflict.

e. Force Expansion Planning

Both planning and programming within DoD and the Federal Government focus on full mobilization. There have been few estimates made of resources needed to go beyond the readiness and sustainability requirements of the current active and reserve force structure. Planning for mobilization expansion of the armed forces had not, in the past, proceeded beyond the development of standby planning organizations and procedures. This meant that detailed planning would have to be done during a crisis or perhaps even after a decision had been made to undertake full mobilization.

We have recently increased the emphasis on planning for a longer conflict that is fought on a global scale. We recognize the need to plan for mobilization expansion of the armed forces in order to understand the demands such expansion would place on the nation's economy and resources. The complexity and magnitude of the problems associated with this expansion require a systematic approach to this planning, to include the basic assumptions and planning guidance.

During most of 1982, a special working group developed initial planning approaches, assumptions, guidance, scenarios, and force increments that go beyond the requirements for full mobilization, tasking the nation's resources in a total mobilization environment.

The group's final report provided a framework for the Military Departments to develop schedules and estimates for expansion of the force structure, assumptions for force expansion mobilization planning, responsibilities for planning and executing emergency force expansion, and an analytical framework to help identify and remove obstacles to rapid force structure expansion under emergency conditions. Additional force expansion mobilization planning efforts during 1983 will establish planning structures within the Military Departments to prepare an initial plan.

### f. Wartime Manpower Planning

The Wartime Manpower Planning System (WARMAPS) is the authoritative DoD-wide structure and source for time-phased, wartime military manpower program data. WARMAPS institutionalizes the computation, presentation, and justification of projected wartime manpower needs and assets by providing a set of common definitions, parameters, computations, and data displays. Furthermore, the system is a data tool for programs to satisfy projected trained manpower needs in wartime and provides a common basis for reviewing Service projections of wartime manpower needs.

Although WARMAPS was originally developed as a program preparation and review tool, its value in mobilization planning has since been recognized. Accordingly, during the past year we have revised the WARMAPS governing instructions to emphasize DoD's mobilization planning role and the data WARMAPS provides for this planning. We have also expanded the instructions to cover DoD's needs for civilian employees during wartime. We have received and processed both military and civilian wartime data from the Military Services and the Defense Logistics Agency. The military data were used in reviewing and analyzing the Services' requirements and supply projections during the annual program review. The data were also used very successfully during the PROUD SABER/REX-82 BRAVO and Tidewater civilian mobilization exercises discussed later in this chapter.

### g. Legislative Actions to Improve Mobilization Capability

We are proposing legislation to enhance our mobilization capabilities by improving our supply of pretrained manpower, as discussed in the Manpower chapter.

Constraints in the Clean Water Act would keep us from mobilizing a significant part of the munitions production base. The changes proposed to the Act by the Administration last year would have eased those constraints by broadening the current Presidential exemption authority for federal facilities and giving him new authority to exempt critical civilian facilities in time of war or national emergency. Congress, however, failed to act on those proposals. Our ability to respond to a major crisis will continue to be limited until the Clean Water Act is amended.

Under a program sponsored jointly by the Office of the Secretary of Defense, the General Counsel, and the Military Department Judge Advocates General, we are nearing completion of a DoD computer-assisted data base for mobilization-related legislation and regulations, and codifying existing statutes and regulations. When completed, this program will identify fully and correctly our emergency authority under existing legislation, and the legal and regulatory impediments to rapid, effective mobilization. This data base will allow us to assure Congress that mobilization-related legislative proposals are required, are in consonance with the sense of Congress as expressed in current legislation, and do not inadvertently duplicate or undermine other legislation.

### 4. Manpower Mobilization Actions

#### a. Mobilization of Guard and Reserve Forces

In conjunction with the general improvements being made in mobilization procedures, we are refining systems for mobilizing Guard and Reserve forces. For example, using the results of a recent study, we have improved our capability to use the reserves more effectively in the pre-hostility period. Concurrently, we are improving the management information systems that monitor the course of Reserve Component mobilization.

#### b. Screening of Ready Reservists

In order to ensure the availability of the Reserve manpower pool, we have intensified the screening program for federally employed Ready Reservists. This program began in 1952 and is now conducted annually throughout the federal government, with the results forwarded to the Congress in an annual report.

The employment screening program has not been expanded into the private sector. The necessity for such screening has been studied. The 1980 Screening Report to the House Appropriations Committee stated that no occupational areas had been identified outside the federal sector that would be severely affected if all Ready Reservists were mobilized. Consequently, there is no evidence justifying the cost of about $4 million required for DoD to conduct a single screening of the private sector.

A major sampling of DoD aerospace defense contractors in 1982 revealed that all of the reservists employed by three of the largest companies could be mobilized.

#### c. Military Mobilization Accession Activities

The Department of Defense and the Selective Service System continue to have a close working relationship that will enhance the flow of manpower needed during mobilization. Inductees are an important source of untrained mobilization manpower that will augment those who volunteer for military service. Since inductees have a statutory minimum of 12 weeks of training before being sent overseas, the sooner they begin training the sooner they will be available. The Selective Service has the responsibility of meeting our untrained manpower requirements specified in our inductee requirements schedule.

To improve its ability to meet our inductee schedule, the Selective Service System undertook a revitalization effort that included training programs for about 10,500 volunteer local board members and 4[illegible]0 appeal board members. The Selective Service is also developing regulations to implement the Alternative Service Program.

The Department of Defense and the Selective Service System operate a joint computer facility at Great Lakes Naval Training Center. The joint computer center, combined with peacetime registration, enables the Selective Service to provide the first inductee 13 days after mobilization and to provide a total of 100,000 inductees within 30 days of mobilization. We conducted two joint exercises last year which validated the induction and claims processing procedures developed by the Selective Service System.

We are also working with the Selective Service System and the Military Enlistment Processing Command (MEPCOM) to smooth procedures for operating the accession system during the transition from peace to war. For example, we have made arrangements to provide the Selective Service with personnel and facilities in case of an emergency resumption of inductions.

In recognition of the importance of the mobilization accession process, we have established a Military Manpower Accessions Committee as part of the Crisis Management Organization. This committee met during the PROUD SABER exercise and laid out the critical mobilization accession issues. We will continue to address these issues in a cross-Service forum using this committee.

### d. Mobilization of DoD Civilians

Mobilization of our military resources would require a concurrent expansion of activity by the DoD civilian work force. Planning for civilian mobilization, however, had been neglected for many years prior to 1981. Since then, the Services and Defense Agencies have taken major steps to improve civilian preparedness. All DoD Components now are required to revise their estimates every two years of how many additional civilians would be needed for each activity during a full mobilization. These emergency personnel would replace recalled reservists and military retirees. They would also handle expanded workloads in logistics, maintenance, and other support functions. Procedures are being evaluated to recruit these people through the help of the Department of Labor, rehiring of civilian retirees, and other measures. The FY 1983 mobilization exercise, discussed later in this chapter, unlike its recent predecessors, stressed the marshalling of civilian resources.

## 5. Industrial Mobilization Activities

The programs described in the Industrial Responsiveness chapter of this report contribute to improving the mobilization capabilities of our industrial base. Several related activities are discussed below.

### a. Industrial Base Mobilization Responsiveness

The Industrial Task Force, established in 1981 to facilitate the development of a surge capability in industry, has completed the first phase of its program. Working directly with industry and with the Military Departments, the Task Force has completed arrangements for the first group of defense systems to be funded for surge capability in FY 1984. When completed, this program will allow us to increase the production rates of critical systems and materiel rapidly in order to respond to a mobilization crisis or a sudden increase in security assistance demands, or to sustain deployed forces until the industrial base can expand.

### b. Transportation and Construction Mobilization Accomplishments

We are also working to improve mobilization planning and operations in the transportation and construction areas. With the

Department of Transportation, we are surveying readiness of the National Defense Reserve Fleet in terms of materiel requirements, logistical support, shipyard capability to handle increased workload, and manpower to operate the fleet. To enhance our mobilization and deployment capability, we have recently completed memoranda of agreement with the Department of Transportation on shipping support of military operations, a contingency response program for land transport, and the civil reserve air fleet.

With the Department of Transportation and the Navy, we are studying methods to refinance that portion of the National Defense Features Program that provides equipment for existing merchant ships that would be useful if the ships were required in a military capacity. Previously, the Maritime Administration financed this portion of the program using construction differential subsidy funds which now have been discontinued.

We are involved with industry in long-range development of wide-body cargo aircraft for civilian and military use. We are also working with the National Defense University (NDU) to determine the adequacy of industrial transportation and traffic management planning in support of surge and mobilization production.

We have drafted a directive that will require the DoD Components to develop facility requirements for mobilization. The directive also establishes procedures for examining the capabilities of the DoD Components and the construction industry to provide the facilities. Furthermore, it provides guidance on programming facilities with long construction lead times in military construction programs. The directive should be published early this year.

Emergency construction authority was provided to DoD on 12 July 1982 by the Congress in the Military Construction Codification Act. This authority allows OSD to use unobligated military construction funds for the Military Services and Defense Agencies to fund facilities required during national emergencies. The benefit of this legislation is being evaluated since we tested it during Exercise PROUD SABER.

With NDU and key private-sector professional groups, we are investigating possible solutions to facility expansion problems anticipated during mobilization such as shortages of construction materials and long lead times required by current contracting regulations.

## 6. Mobilization Exercises

### a. PROUD SABER/REX-82 BRAVO

We continue to emphasize the importance of testing our mobilization directives and plans by conducting periodic mobilization exercises. Last fall, in conjunction with the Federal Emergency Management Agency (FEMA), we conducted a major mobilization exercise, PROUD SABER/REX-82 BRAVO. This was the latest in a series of biennial exercises to test our mobilization directives, plans, systems, and procedures under simulated wartime conditions. There was also widespread federal government participation. Since the exercise occurred halfway through this Administration's first term, it is an important indicator of how well we are doing in improving our mobilization planning.

We were encouraged by the improvements and progress we noted in the PROUD SABER exercise. The procedural problems encountered in previous mobilization exercises were either resolved or well on their way to resolution. New procedural problems that surfaced were largely second generation, that is, those that are not visible unless the basic systems and procedures are in place or those that require fine tuning of the procedures. In the areas of resources and logistics, our achievements were not as dramatic, although we did see progress in a number of areas where we have been able to apply funding increases. Others of our logistics problems remain, however, and we continue to experience stockage below the levels we believe we need in several functional areas. While we did not play the full scope of industrial mobilization due to the design of the exercise, we did address the surge capabilities of the industrial base. The results of this surge analysis demonstrated that we will continue to require a much greater effort than has been expended in the past if we are to enhance our surge and conversion capabilities. Coordination and management were especially improved, particularly at the OSD level, as were our functional working relations with FEMA, the National Security Council, and the civilian departments and agencies of the federal government.

### b. Tidewater Exercise - Civilian Mobilization

As part of the PROUD SABER/REX-82 BRAVO exercise, we examined the capability of DoD to identify its civilian mobilization requirements and for the Department of Labor to supply the civilian work force needed by DoD. The exercise participants included the Army, the Navy, the Air Force, FEMA, the Department of Labor, and the Office of Personnel Management (OPM). We focused our effort in the Virginia Tidewater area to get a perspective on the problems concerning civilian mobilization when multiple claims for manpower resources are placed on resource agencies such as OPM and the U.S. Employment Service. The exercise demonstrated that the procedures we have established for defining our needs for civilian manpower under full mobilization are valid, but we are unable to define our needs at lesser levels of mobilization. We are taking action to improve this situation. We must ensure that all claimants for manpower resources, at whatever level of mobilization, know and understand the procedures. Exercise participants gained a clearer understanding of the importance of civilian manpower mobilization planning and the need for communication among the resource and claimant agencies.

## 7. Conclusion

We are making significant progress on a number of fronts as we continue to improve our mobilization planning and programs. The Emergency Mobilization Preparedness Board represents a major step forward in enhancing interdepartmental mobilization planning. My appointment of a new Deputy Assistant Secretary for Mobilization Planning and Requirements increases DoD's emphasis on military mobilization planning, conventional force deployment planning, and contingency mission resource requirements development. The Military Mobilization Working Group will continue its efforts to improve support for deployment, identify the availability of resources to implement military mobilization, and develop an improved system for military support to civil authorities. We will continue to test and improve our plans through mobilization exercises.

## K. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION

### 1. Introduction

Research, Development, Test, and Evaluation (RDT&E) activities lay the groundwork for the acquisition and deployment of affordable, reliable, and supportable weapons and equipment needed to give our armed forces the means to carry out their assigned missions.

Our program has been developed both to correct near-term deficiencies and to address long-term needs in each mission area. I have discussed the specific initiatives taken in those mission areas in other chapters of this report. In this chapter, I will cover a number of other RDT&E activities.

### 2. Science and Technology Programs

The Science and Technology (S&T) program, comprising the Technology Base and Advanced Technology Development programs, is the foundation for the country's future capabilities to meet its national security needs. These programs are managed by the Military Departments, the Defense Advanced Research Projects Agency (DARPA), the Defense Nuclear Agency (DNA), and the Uniformed Services University of the Health Sciences (USUHS). Research and development activities are actually performed by industry, universities, and government laboratories. This combination of talent and perspective provides us the means for meeting our technological needs in a world where know-how and the ability to meet new challenges play a vital role in national security and survival.

#### a. Assessment and Objectives

As I indicated in earlier chapters of this report, the Soviets continue to invest a substantial amount of effort in military research and development and, as a result, are fielding increasingly sophisticated equipment. They have long been excellent in the basic sciences and have developed very large programs for the education of scientists and engineers. The apparent Soviet commitment to the continued development and fielding of increasingly high-performance, technically advanced weapon systems, added to the numerical superiority of their armed forces, makes the Soviet Union a formidable adversary. Part of our response must be to place continued emphasis on our own national science and technology programs.

While the Soviet Union must rely primarily on military research and development, the United States is fortunate in possessing a strong private sector that it can draw upon for novel and creative approaches to the improvement of our military forces. We are also fortunate to have as allies advanced industrial nations with independent technological capabilities for the development of advanced military materiel. In order to take the best advantage of this situation, the Department of Defense will continue to advocate, in addition to the S&T program, programs that increase our national supply of scientists and engineers and the availability of adequate tools for our universities to conduct advanced research. Cooperative efforts with our allies, among other endeavors that promote the health and well-being of the technical community, will be continued. In addition, we will continue to support a strong and vigorous independent research and development program within the industrial sector.

b. Program Status

The DoD S&T program covers a broad spectrum of projects applicable to our future military needs. Since 1976, we have provided for increases in the Technology Base program to compensate partially for the 50% decrease in buying power that occurred during the 1960s and early 1970s. We are appreciative of the support provided by the Congress in achieving this goal and request its continued support. I consider it prudent that we continue our past efforts to provide real technical options for the 1990s but also, just as important, to prevent adverse technological surprise. Our request for the Science and Technology program in FY 1984 is shown below:

TABLE III.K.1

Science and Technology Program
(Dollars in Millions)

| | FY 1983 | FY 1984 |
|---|---|---|
| Army | 922 | 1,155 |
| Navy | 971 | 1,095 |
| Air Force | 1,102 | 1,336 |
| Defense Agencies | 1,038 | 1,191 |
| Total | 4,033 | 4,777 |

Our nation's universities provide three valuable services for the DoD research and development community: they are the source of the nation's scientists and engineers, they perform a substantial portion of our research, and they are a source of expert advice and consultation. In order to derive the greatest benefit from the academic community, we plan:

-- To increase the universities' portion of DoD's basic research program both to take advantage of their innovative talent and to increase the number of graduate students supported;

-- To upgrade university research instrumentation in areas of interest to DoD;

-- To increase the number of graduate fellowships in areas of importance to DoD; and

-- To continue our support of the DoD/University Forum, which was established as a means of promoting discussion by high-level university and DoD officials on the relationship between DoD and the universities.

The DoD is emphasizing joint and cross-Service programs to ensure that we receive maximum benefits from our S&T investment. We now have established and staffed an Office of the Assistant for Directed Energy Weapons to coordinate the efforts of the Services and Defense Agencies in this large and important program.

A comprehensive tri-Service plan for the development of microelectronics components, microwave devices, and electro-optical equipment has been developed to eliminate duplication of effort and enhance productivity. The Army and Navy infectious disease and combat dental research portions of the military medical program have been consolidated, with the Army serving as the lead agency. In addition, liaison officers from the other Services will be assigned to the Army's major facility for chemical defense research matters. The S&T program is an excellent mechanism for cooperative Service programs, and we plan to encourage this mode of operation.

The Services manage approximately 75% of the S&T program. Their efforts cover all technical disciplines and warfare areas of interest to DoD. Some of the program highlights are discussed below.

(1) The Very High Speed Integrated Circuit (VHSIC) program promises significant increases in performance for military equipment and applications using microelectronics. Six contractor teams are developing a family of devices for broad system use. The new "chips" will be ready for insertion into military equipment for demonstrations in FY 1984. We have requested funds in the FY 1984 program for this effort so that the increased capability can be fielded at the earliest possible date.

(2) The Navy/Air Force/DARPA programs in carbon/carbon and metal-matrix composites for tactical and strategic missiles continue to be very productive. These programs will assist us in developing very high-speed/long-range tactical and cruise missile systems with capabilities far beyond what is now technically achievable.

(3) The Chemical Defense S&T program has made substantive progress in this critical technology area. We have been able to double the university contract base. We plan to seek ways of adapting new biotechnology techniques (recombinant DNA, gene splicing, etc.) to develop improved vaccine and therapeutics for chemical/biological defenses. We have also begun a five-year research program to develop new technology we can apply for cost-effective and safe methodologies for the demilitarization of unusable or obsolete chemical munitions, discussed in the Chemical Warfare chapter.

(4) The Adverse Weather Precision Guided Munitions Technology program is making good progress toward development of both radar and millimeter wave seekers designed for autonomous acquisition and attack of military targets. This technology, if successful, will provide a significant "force multiplier" effect on the conventional battlefield across a broad range of environmental conditions.

(5) The DoD Software Technology program requires additional fiscal and management support. We have made considerable progress toward implementing the Ada language as the standard DoD High-Order Language, but much remains to be done. The systems used by our fighting forces are becoming increasingly dependent on computers for their successful operation. Increased demands in both quantity and complexity have driven up the software costs of our computer systems. Cost considerations include not only the original cost but also life-cycle costs that often span a period of 20 years. In addition, software transportability (from one system to another) and the need for frequent software changes, as equipment or procedures are changed, directly affect the combat capabilities and survivability

of our forces. I have requested FY 1984 funds to undertake a software technology initiative to overcome our current limitations in developing and maintaining software systems. The program will be a coordinated tri-Service effort managed at the OSD level. I request your support in getting this critical program under way.

### c. The Defense Advanced Research Projects Agency (DARPA)

As the central research organization for the Department of Defense, DARPA's primary responsibilities are to help maintain U.S. technological superiority over its potential adversaries and to prevent technological surprise. Its goals are to pursue those highly imaginative and innovative research ideas and concepts offering significant military utility, to support and manage projects assigned by the Secretary of Defense, and to marshal advanced research through demonstrations of feasibility for military application. As high-payoff technology areas mature, feasibility demonstrations are conducted in cooperation with the Services, since they can move the technology rapidly through the development process.

While DARPA's research activities cover a broad spectrum of technologies, some of its major efforts are discussed below.

(1) Under the Advanced Cruise Missile Technology program, DARPA is investigating promising technological options for increasing the range, accuracy, and survivability of future generations of cruise missiles. The technology being pursued will also provide new basing and employment options for future cruise missile forces. Also, by investigating advanced propulsion systems that incorporate advanced materials, new engine concepts, and high energy fuels, we hope to increase the range and payload of our cruise missile systems. Engine thrust-weight ratio is projected to increase by 50%, with a 40% improvement in fuel consumption. Guidance and targeting technologies now being developed -- self-contained all-weather guidance, for example, and a stealthy terrain-following/obstacle-avoidance capability for long ranges -- should produce substantial improvements in missile accuracy. The technical capabilities being sought will permit the use of precision non-nuclear munitions against long-range, high-value land and sea targets. The advances could provide operational options for flexible basing, an interhemispheric range of action, multiple attack roles, and target discrimination.

(2) The Space Laser Triad (Alpha, Lode, and Talon Gold) program is structured to develop the technologies required in three key areas for a space-based laser weapon system. The objective of the Alpha program is to resolve the critical technology issues associated with space applications of a chemical laser device. Through ground-based testing, it seeks to demonstrate the feasibility of directly extrapolating chemical laser technology, with a high degree of confidence, to the power level and beam quality required in space. The objective of the Large Optics Demonstration Experiment (LODE) is to demonstrate the necessary beam control technology. The Talon Gold Program will develop and test the advanced acquisition, tracking, and precision pointing capability required by the system. The test program will be conducted using the space shuttle, and will utilize both high-altitude aircraft and space targets to obtain realistic target data.

(3) The survivability and endurability of command, control, and communications systems are being improved by the development of a comprehensive internetted system that will provide worldwide capabilities linking satellites, tactical units, command centers, and computer-based information centers into a network virtually invulnerable to destruction. This effort builds upon earlier accomplishments in packet switching, internetting intelligent systems, radiation-tolerant gallium arsenide integrated circuits, and microelectronic system technology.

(4) The Submarine Laser Communications program is a joint DARPA/Navy effort to develop the technology for using blue-green laser transmitters to communicate with submarines at operating depths.

### 3. Technology Transfer

A study of Soviet successes in acquiring Western technology makes it apparent that the Soviet Union is a major beneficiary of technology transfer, both legal and illegal, from the Western world. There has been a well-orchestrated and successful Warsaw Pact effort to acquire Western technology both overtly and covertly. The most successful overt means include purchase of equipment, purchase of whole manufacturing lines including turnkey factories, and training of students and others in Western nations. Although technology transfer to the Soviet Union is pervasive, it is far from uncontrolled. In support of U.S. policy, it is DoD's objective in export control matters to protect U.S. lead times in the application of advanced technologies to military use. We have achieved major accomplishments in meeting this objective over the last year, and have established major initiatives to focus our efforts in the pursuit of this goal in the years to come. Primary activities accomplished in the last year or under way this year include the important critical technology project, the Coordinating Committee (COCOM) List review, compliance support, the NATO Technology Transfer Study, and development of technical policy for DoD review of export license applications.

The critical technology project involves development and update of the Militarily Critical Technologies List (MCTL), as required by the Export Administration Act of 1979; application of the MCTL in export regulations and export control lists; and improvements to industry's understanding of DoD's technical concerns in export control. In the last year, work continued on a broad front to update and improve the coverage and description of the critical technologies and related goods in the MCTL. Application of the MCTL as required by the Export Administration Act involves revision of the control lists to include the MCTL concerns, revision of U.S. export regulations to protect the "arrays of know-how," and use of the MCTL in the license review process. The MCTL is currently being used in the DoD licensing decision process as a source of supplementary information on items controlled by the commodity control list (CCL) and International Traffic in Arms Regulations (ITAR) Munitions List. The MCTL, together with supporting documentation, is expected to support timely, predictable, and consistent license reviews. DoD has also developed and sent to the Department of Commerce proposed guidelines for interagency use of the MCTL in the license review process. We are also working with representatives of industry to improve their understanding and acceptance of the MCTL.

The COCOM (comprising representatives from Japan and the NATO countries, excepting Iceland and Spain) has developed an agreed list for control of the transfer of products and technology to the Warsaw Pact. Following the High Level Meeting of COCOM in January 1982, the first such meeting in nearly 30 years, the U.S. prepared major new initiatives to strengthen multilateral controls over the export of strategic technologies and equipment to the Warsaw Pact countries. The Department of Defense has been in the forefront of this effort, involving preparation of well over a hundred technical proposals to be used in the COCOM list review. We shall also provide most of the technical support at the negotiating table over the next year. The MCTL served as the foundation for the preparation of the new technical proposals.

NATO agreed in October 1981 to undertake a study of the security implications for the NATO Alliance of the transfer to the Warsaw Pact, by commercial and other means, of militarily relevant technology. A final report was provided to the NATO Defense Planning Committee and the North Atlantic Council in May 1982.

We have developed technical guidelines for the export of computer hardware and software to Eastern Europe, and have begun an intensive review of DoD delegation of authority for export control to the Department of Commerce.

We have made significant progress over the past year in controlling the export of dual-use products and technology. In October 1981, we eliminated a persistent backlog of export applications awaiting Defense review for national security concerns, and have subsequently processed most of the new applications within 60 days.

We have taken a number of initiatives in the past year in support of the selective transfer of advanced military technology to allies and friends. This has been done in the context of cooperative defense efforts and security assistance when mutual benefits are derived.

We have also taken steps to ensure that the transfer of technology to potential adversaries is strictly controlled. We have expended considerable effort in developing reasonable, well-balanced guidelines for the control of sensitive technologies such as the Very High Speed Integrated Circuit (VHSIC). We have expanded clearance requirements for information proposed for public release in order to prevent the unauthorized disclosure of critical military technology.

We have established a DoD-university forum which has discussed, among other subjects, the effect of technology export controls on university research. We intend to continue this cooperative effort.

A number of management improvements in technology transfer functions have been implemented within DoD in the last year. A new DoD directive on control of technology transfer will provide an integrated and coordinated DoD process in technology transfer matters and clearly establish the responsibilities of DoD components. Also, the Services, the Defense Intelligence Agency, and the National Security Agency were directed to establish program elements to dedicate resources to handle technology transfer control responsibilities. In addition, during the last year DoD has added both permanent and temporary staff positions in support of the technology transfer function. This additional staff support has, among other things, enabled us to devote increased attention to reviewing the foreign visitor program from the perspective of DoD's technical concerns.

DoD is also seeking to increase review of free world export license cases and has brought areas of particular concern to the attention of the Department of Commerce. Further, DoD has provided to the Department of Commerce suggestions concerning proposed revisions to Section 379 (Technical Data Regulations) of the Export Administration Regulations, in order to assist in improving the control of critical technologies. Finally, we are implementing the Foreign Disclosure and Technical Information System (FORDTIS), a computerized information system covering the MCTL and supporting documentation, Munitions List cases, CCL dual-use cases, and other relevant information. FORDTIS will be available to agencies within DoD as well as to the Departments of State, Commerce, Energy, and other departments with technology transfer responsibilities.

### 4. International Programs

#### a. Policy Objectives

Our basic objective in this area is to enhance the security of the U.S., our allies, and friends by improving the effectiveness of our international cooperative activities. Force modernization and cooperation with NATO, other allies, and friends in the areas of research and development, security assistance, and technology transfer remain the primary vehicles through which we are able to advance our own national interests and, at the same time, enhance the overall security of the free world. Our technology transfer program will be pursued in the context of the prudent technology protection strategy discussed in the previous section.

#### b. Current Programs and Initiatives within NATO

Our cooperative defense efforts continue to focus on achieving a high state of force readiness, sustainability, and interoperability of U.S. and allied forces. Our cooperative efforts in the areas of research, development, and weapons procurement must continue to capitalize on the technological advantage and combined superiority of the free world's industrial base. In that regard, we are pursuing initiatives to increase the direct involvement of the private sector in international arms cooperation. The active involvement of industry in the review and formulation of international defense cooperative policy has brought balance and practicality to those problems that had formerly been considered impediments to international defense cooperation.

At the NATO Defense Ministers meeting in May 1982, I proposed that the Alliance undertake an immediate study on exploiting new technologies for the improvement of our conventional defense. At the December 1982 Ministerial meeting, I presented the U.S. proposal for initiating this NATO-wide effort for improving conventional defense in the primary areas of defense against first-echelon attack, interdiction of Warsaw Pact follow-on forces, improving counter-air capability, enhancing command, control, communications, and intelligence ($C^3I$) capabilitities, and disrupting Warsaw Pact $C^3$.

We continue to support efforts to streamline the functions of the Conference of National Armaments Directors (CNAD) and to improve the overall armament planning process. The key element in this effort is the full implementation of the Periodic Armaments Planning System (PAPS). The PAPS framework closely parallels DoD's own process for managing the development of major systems and is a NATO-wide mechanism for rationalizing arms development to meet the needs of the Alliance. Our goal within NATO continues to be the further refinement of structures that promote efficiency, effectiveness, and mutual interests.

Progress in arms cooperation among NATO allies remains mixed. There are a number of cooperative research and development programs currently under way. Although production decisions on many of these programs are still to be made, they do provide a degree of encouragement. We remain committed to cooperation with NATO and other allies in order to capitalize on our combined technological and industrial superiority and thereby achieve a high state of force readiness, sustainability, and interoperability of U.S. and allied forces. The recent Roth/Glenn/Nunn Amendment supports our efforts, and we will intensify consultations toward an equitable and efficient sharing of the financial burdens as well as the technological and economic benefits of NATO defense.

### c. Cooperation with Other Nations

Cooperative arrangements with friendly nations in other areas continues on a bilateral basis. Our objectives are to further mutual security interests, to exert U.S. influence, to stretch the resources available to us and to them, and to help develop their self-sufficiency.

We will continue a balanced and effective armaments cooperative program for those Middle East nations who share our security interests. For example, our research and development activities with Israel include test and evaluation of each other's equipment, funding of R&D in the other country, competitive R&D, and joint projects. With Egypt, our program of defense production assistance should enable that country to support its national forces more economically as it shifts from dependence upon Soviet-supplied equipment.

Japan has the capability for joint or complementary R&D. We expect to establish a viable armaments cooperation program with the Japanese that will provide a two-way flow of technology and is supportive of agreed defensive mission roles for their forces in the region. We will continue our cost-sharing program with the Republic of Korea (ROK), which has been a notable success for over a decade.

We expect to establish armaments cooperation programs with friendly, less developed nations that are effective in achieving our and their national objectives. During the past year we signed an agreement with Indonesia providing for U.S. firms to assist in modernizing Indonesian defense industries. We have begun similar discussions with the governments of Singapore and Malaysia.

Within our own hemisphere, Brazil is now capable of producing most types of ground force systems and is the free world's third largest exporter of armored vehicles. It also ranks sixth among free world aircraft producers. We plan to develop cooperative programs with Brazil -- and perhaps with other nations from Latin America as their capabilities develop.

Our efforts in non-NATO Europe, with neutral and nonaligned nations, can be viewed as a pursuit of common interests. We plan the transfer of technology with appropriate safeguards and the sale of equipment to those countries whose policies advance interests in consonance with our own.

## 5. Nuclear Programs

### a. Stockpile Modernization

The Department of Defense and the Department of Energy (DoE) share statutory responsibilities for managing the U.S. nuclear weapons program. The President authorizes the number and types of nuclear weapons to be produced by DoE and transferred to DoD, approves deployment plans for these weapons, authorizes nuclear testing programs, and provides specific programmatic direction. DoD is responsible for specifying desired weapon characteristics and for providing weapon delivery systems, while DoE designs and produces the nuclear warheads. Thus, decisions affecting either the system or the warhead design must consider the impact on both departments.

The nuclear weapons stockpile is being modernized to enhance deterrence through improved operational capability and to ensure that appropriate standards of safety, security, and command and control are maintained.

Programs in which both departments are involved include the development, production, and deployment of modern nuclear systems (Peacekeeper, the B-83 Strategic Bomb, B-61 Tactical Bomb, ALCM, Trident, GLCM, Pershing II, Tomahawk, SM-2, and 8-inch and 155mm artillery projectiles). Production of the Enhanced Radiation/-Reduced Blast version of Lance is now complete. Additionally, as an economy measure, and to improve and extend the useful life of current weapons, we will upgrade some of the older weapons in the stockpile, such as B-61 and B-28 bombs, to incorporate modern safety and security features.

### b. Weapons Production Capabilities

We strongly support efforts to modernize and upgrade the entire nuclear weapons production complex and encourage early planning for replacement of key facilities.

### c. Special Nuclear Material

The total amount of special nuclear material is a constraint that we cannot significantly alter in the short term. Supply and demand must be carefully monitored and, because of the long lead time involved, production decisions must be made in a timely manner. There is a valid need to develop sufficient reserves to ensure that national security requirements are not constrained by the availability of SNM. We support those initiatives that will restore DoE capabilities to provide both the SNM needed for current requirements and an appropriate reserve.

### d. Safety and Security

The safety and security of our nuclear weapons continue to be a major driving force in our nuclear stockpile modernization program. In 1968, the oldest of the 26 types of stockpiled weapons was 11 years old, and the average age was seven years. Thirteen years later, the oldest of 24 types was 23 years, with an average age of 12 years. We are replacing many of these older nuclear weapons to take advantage of today's new technologies, such as insensitive high explosives and improved electrical safety measures.

e. Defense Nuclear Agency

The Defense Nuclear Agency conducts the DoD nuclear weapons effects research program. The purpose of the research is to assess the survivability of our military systems in a nuclear environment, predict lethality thresholds for destruction of enemy assets, and develop the technological capability to enhance the survivability and security of our forces. Results are obtained through underground nuclear and aboveground high explosives test programs, extensive use of nuclear weapons effects simulators and computer models, exoatmospheric experiments, analyses and evaluations of the results of these tests and experiments, and examination of U.S. versus enemy nuclear warfighting capabilities. The program in FY 1984 is designed to encompass all major strategic systems (i.e., TRIDENT II, MILSTAR, B-1B, Peacekeeper, etc.) scheduled to be introduced in the near future, $C^3$ systems, and key tactical systems.

6. Test and Evaluation (T&E)

a. Major Programs

The Director, Defense Test and Evaluation maintains oversight of and advises me on the status of tests and evaluations of all major weapon systems in acquisition. He approves the plans for all major weapon system tests, monitors the progress of the testing, approves regular reports on testing to the Congress, and provides me with an independent assessment of the adequacy of testing completed and the operational suitability and effectiveness of systems at major milestone reviews such as the Defense Systems Acquisition Review Council (DSARC) meetings. His assessments play a major role in evaluating program risk and determining any additional test requirements. In conjunction with our initiatives to streamline the acquisition process, he is instituting measures to identify problems early in the test process, use more innovative test techniques, and identify adequate funding for test hardware up front in the budget process.

b. Test and Evaluation Initiatives

(1) Increased Emphasis on Qualification Testing

Case studies of several major weapon system programs to evaluate the effectiveness of qualification testing have highlighted areas for improvement by Service program managers and industry. As a result of this effort, we expect system contract requirements and specifications to be more realistic, operationally oriented, and time sensitive. The lessons learned will ensure better planning and management to shorten future weapon system acquisition times.

(2) Identification and Funding of Adequate Test Assets

The adequacy of test hardware will be addressed in the Director's independent assessment for each DSARC review in order to ensure that sound test and evaluation programs can be budgeted and executed. This emphasis on adequate front-end funding of test hardware will reduce the risk of inadequate testing of new systems prior to production.

(3) T&E Requirements Analysis System

The current T&E process is being reviewed in order to determine where improvements in efficiency can be realized. This information will be used to design a generic model that may be used by the Director and Service test agencies to determine the adequacy and effectiveness of T&E as planned and conducted.

(4) T&E of Embedded Computer Software

We have initiated an effort to examine existing software quality assurance tools and the current state-of-practice in software T&E, with the objective of developing improved guidelines for embedded software testing.

(5) Development of T&E Simulator and Testbed Networks

We have conducted a survey of existing simulators and testbeds in an effort directed toward design, demonstration, and eventual implementation of a network that will allow interconnection and interoperation of geographically dispersed simulations and testbeds. This effort should produce a significant increase in our ability to accelerate testing of subsystems to help alleviate the problems associated with concurrent programs.

c. Joint Test and Evaluation (JT&E)

The JT&E Program for FY 1984 contains six ongoing tests to examine the capability of developmental and deployed systems to perform their intended missions in joint operational environments. These tests address command, control and communications countermeasures; data link vulnerability; electro-optical guided weapons countermeasures and counter-countermeasures; identification friend, foe, or neutral; forward area air defense evaluation; and Joint Logistics Over-the-Shore II.

d. Major Test Ranges and Facilities

(1) Joint Targets Acquisition

Two aerial targets have been evaluated and selected for joint Service use. The Air Force/Navy Firebolt high-speed/high-altitude aerial target and the Army/Air Force MQM-107B subsonic target are now in joint Service production. Also, Army cooperation with the Air Force in the utilization of J-69 engines for BQM-34 targets and the conversion of AQM-34 remotely piloted vehicles to BQM-34s will achieve additional cost savings.

(2) NAVSTAR Global Positioning Satellite (GPS) Initiatives

A tri-Service GPS Range Application Study Committee was established and has identified several uses of GPS for test and evaluation and training ranges. In the long term, the use of GPS can significantly reduce the cost of Position Location (PL) systems, provide higher accuracies over wide geographic areas, and provide a high level of PL standardization among the Services and ranges at substantially reduced operating costs.

(3) Joint Instrumentation Acquisition

Joint initiatives to develop and/or procure common instrumentation for the Service ranges and to improve affordability include: Surveillance Radar (FAA lead, tri-Service participation), Multi-Object Radar (Navy lead, Army and Air Force participation), and GPS Applications (Air Force lead, Army and Navy participation).

(4) Reduction of Test Assets

In assessing the broad ocean area support requirements, the Strategic Systems Test Support Study Group recommended the disestablishment of the USNS ARNOLD, USNS WHEELING, and USNS VANDENBERG range instrumentation ships -- all of which have been deactivated and replaced by lower-cost, improved alternatives.

(5) Aging Facilities and Backlog of Maintenance and Repair

A substantial number of our T&E facility buildings are of semi-permanent and temporary construction. This situation -- together with the nature of test and evaluation requiring remote, scattered sites; extensive transportation and utility systems; and airfields and hangars located in harsh environments (such as extreme desert conditions) -- contributes to a demanding backlog of maintenance and repair each year. Higher priorities for other programs continue to degrade our ability to maintain adequate facilities.

(6) Low, Fast Targets for Surface Ship Missile Threat Simulation

There is no aerial target available to represent the supersonic low-altitude and anti-ship missile threat for T&E of counterweapon systems. The Firebrand "sea skimmer" target program was cancelled in December 1981 because of cost and schedule difficulties. Various alternatives for a near-term solution are under evaluation.

e. Foreign Weapons Evaluations (FWE)

The FWE program has resulted in Service selection of nine items of equipment and munitions for procurement in the next several years. Over 40 FWE programs are now in progress, and I expect to see the Services take greater advantage of foreign-developed equipment that is available to meet our operational requirements.

7. Defense-Wide Support

a. Space -- Program Status

The NASA-developed manned space shuttle will provide increased capabilities in terms of payload weight and volume delivered into orbit, on-orbit payload checkout and servicing, and retrieval from low earth orbits. Current boosters and production capability will be retained as a backup until shuttle capabilities have been adequately demonstrated operationally. We have begun our confirmation of the shuttle's capabilities for military applications with an experiment on the fourth test flight. The first DoD use of the shuttle to deploy an operational payload will occur in late 1983. The Inertial Upper Stage (the booster required to move payloads from shuttle orbit to higher orbit) is meeting its performance specifications. The initial flight on a Titan III 34D in October 1982 was highly successful, and flight on board the shuttle is scheduled for February 1983. Progress on construction of shuttle facilities at Vandenberg AFB continues toward an IOC date of October 1985. Data security procedures are being implemented as we modify NASA facilities to permit classified DoD operations. Studies are under way to define an appropriate approach to assuring the required availability of space systems capability at all levels of conflict.

Satellite Control Facility (SCF) data systems are being modernized to provide the capacity to support new space systems. A new Consolidated Space Operations Center (CSOC) is planned to eliminate the single nodes that exist at the SCF and NASA facilities supporting DoD spacecraft and shuttle operations. In FY 1983, CSOC facilities construction and systems acquisition will lead to initial satellite operations in late 1986. We plan to acquire the CSOC control capability by a phased approach whereby capabilities will be added incrementally as needed to support operational requirements.

### b. Geophysics and Global Military Meteorological and Oceanographic Support

This activity includes the development and acquisition of geophysical (meteorological, oceanographic, ionospheric, and space environment) systems and the operations of the global military meteorological and oceanographic support system. Reliable and accurate geophysical information is a critical factor in all phases of weapon system acquisition and employment, from design criteria to combat tactics. The growing sophistication of our weapons results in increasingly complex sensitivities to geophysical phenomena, thus requiring more advanced meteorological and oceanographic support systems in order for the weapons to achieve their expected performance. Our technology base programs address fundamental geophysics and its application. Our development, acquisition, and employment programs support our tactical commanders in making rapid decisions based on optimized meteorological and oceanographic information.

This year's geophysical/environmental sciences program continues to concentrate on atmospheric and oceanic transmission and modernization of overall support capabilities. The new Extended DoD Atmospheric Transmission Plan coordinating all Service efforts expands work in the millimeter wave spectral area and increases coordination in aerosol data collection. Past applications have now provided infrared tactical decision aids to the field for precision guided munitions support, and the modernization of our tactical support continues with the engineering development of tactical observation, processing, and display systems for shipboard and field deployment.

The modernization of our 20-to 30-year-old fixed-base weather equipment continues with the development of the Automated Weather Distribution System (AWDS) and the Next Generation Weather Radar (NEXRAD). AWDS is progressing in the engineering development phase, and NEXRAD -- a joint Defense, Commerce, and Transportation Department program -- is entering the validation phase.

As was confirmed by events in the South Atlantic conflict, one of the most critical wartime readiness elements is a meteorological/oceanographic satellite capability. The Defense Meteorological Satellite Program (DMSP), providing direct, secure transmissions to tactical vans and naval vessels deployed around the world, may be our only consistent source of global weather and ocean data for our operational military commands in wartime. Program improvements in acquisition, instrumentation, and secure communications will lead to a more dependable wartime capability. Both the NEXRAD and DMSP programs have undergone significant changes this year to reduce their overall costs.

### 8. Small Business Innovative Research

The Defense Department will give its full support to the newly enacted Small Business Innovative Development Act, which requires that a percentage of each federal department's RDT&E funding be set aside for research and development contracts to small businesses. The funding levels for this new program will increase gradually over the years, to a maximum of 1.25% of RDT&E funds by FY 1987. For the current program period, the total benefit to small industries may be as high as $170 million. Although the Department has encouraged small-business RDT&E for years, this initiative formalizes our support publicly. We anticipate that small industries will benefit greatly from the potential business, and that the Government will benefit both from an expanded research and development base and from the concepts and hardware it develops.

### 9. Conclusion

The FY 1984 RDT&E program balances needed improvements in our near-term capabilities with essential long-term requirements. We cannot close all the gaps in the immediate future. Difficult choices have been made to ensure that our FY 1984 program addresses the most pressing priorities. While we continue to make progress, the real payoff -- adequate quantities of effective and affordable systems in the hands of our men and women in the field -- remains ahead.

## L. MATERIEL READINESS, SUSTAINABILITY, AND OTHER LOGISTICS

### 1. Introduction

The defense logistics system provides the requisite support to enable U.S. forces to deter aggression or, should deterrence fail, to conduct combat operations successfully in support of our national objectives. To provide this support, the logistics system must be sized and structured to carry out the expected workload for a broad spectrum of possible wartime scenarios. Similarly, logistics plans, procedures, and systems employed in peacetime must be workable in a wartime environment. Finally, the logistics system must be operated in the most cost-efficient manner in peacetime while still being capable of executing its wartime mission on short notice.

The essence of the task confronting the defense logistics system is expressed in the following objectives:

-- Provide the materiel readiness and sustainability necessary to equip and employ our forces in support of our national defense objectives,

-- Provide our military population with adequate food, housing, and clothing, and

-- Provide essential upkeep of DoD's capital plant and facilities.

To put the magnitude of this task in perspective, consider the following:

-- U.S. forces are operating at over 500 major installations in the continental U.S. and 250 installations overseas;

-- The DoD operates and maintains a larger inventory and wider assortment of end items than any private sector organization;

-- In peacetime, the defense logistics system must support an average of about 2.1 million active-duty military personnel, and about one million selected reserve personnel; and

-- The worldwide logistics system operating to support DoD's facilities, people, equipment, and weapons consists of 30 wholesale supply depots, 9 ammunition storage depots, 19 inventory control points, 35 depot maintenance facilities, 197 wholesale POL storage facilities and pipelines, and 115 ocean and air terminal facilities.

Improving the readiness and sustainability of our existing forces through a balanced and comprehensive logistics program continues to be a top priority in this Administration's defense program. My objective in this chapter is to assess this logistics support posture -- both as we see it today and as we project it to be during the program period. I will do this through a review of logistics program funding profiles, weapon system and materiel readiness data, and selected logistics management improvement initiatives.

In February 1983, we will send to the Congress our annual Materiel Readiness Report (MRR), which is Volume II of the fiscal year 1984

Force Readiness Report (FRR). The MRR provides supplemental information on funding for materiel readiness purposes in the President's budget for FY 1984, and data on the materiel readiness that is projected to occur from appropriation of DoD's budget request. Discussions of overall materiel readiness trends, and DoD efforts to improve materiel readiness measurements, analysis, and management are contained in Volume I of the FRR. A display of logistics readiness by major items of equipment is provided for the Guard and Reserve in an annex to Volume II of the FRR.

## 2. FY 1984-88 Programs

### a. Materiel Readiness

#### (1) General

Materiel readiness is expressed in terms of asset posture and materiel condition status. Asset posture is the inventory of weapon systems, combat-essential equipment, and materiel on hand relative to the inventory prescribed to perform the wartime mission. Materiel condition status is the fraction of the possessed inventory of each weapon system, combat-essential equipment, or materiel that is operational (that is, available and capable of performing its wartime mission).

In the following section, I will discuss two major determinants of weapon system readiness -- spare parts and depot repair funding. For these resources, I will explain the relationship between resource availability and readiness and highlight the impact of funding deficiencies. This discussion is followed by a review of selected weapon system mission capable rates and ship materiel readiness performance, which are based on resource availability.

#### (2) Spare Parts Support

The availability of peacetime operating spare parts (POS) is critical to the peacetime readiness of our forces. These items are needed to keep our equipment operationally ready and available both for peacetime training and for increased activity during the initial stages of conflict. All spare parts fall into one of two general classes: consumables and repairable components.

##### (a) Repairable Components

When part of a weapon system fails, that component must be either repaired or replaced. Usually, repair is given first priority, since it can generally be accomplished for between 1/4th and 1/7th of the cost of new procurement. However, all components have a finite repair life, and procurement requirements are generated to replace assets condemned in the repair process as well as to accommodate demand increases, lead-time changes in the procurement process, increased force levels, and modernization. The procurement cycle commences with a forecasted need by the user for more components than are projected to be available in the supply system; it ends with the delivery of the spare parts from the supply source.

Procurement lead-time -- the period between obligation of funds for spares and the delivery of those spares -- averages two years for repairable items. This delays the attainment of improved mission capability resulting from increased funding for spares. Therefore, it is imperative that we fund spares support as early as possible in order to ensure that assets are delivered in time to support planned force activity levels, modernization programs, and other requirements that are dependent upon the availability of repairable components.

Table III.L.1 summarizes our procurement of peacetime repairable spares for FY 1981-84. The significant increases each year clearly demonstrate our emphasis on providing adequate peacetime readiness support. Our FY 1984 budget of $9.3 billion for spares procurement is about twice that of FY 1981. Despite these substantial increases, some replenishment spares funding deficits will exist in FY 1984, primarily because of recently identified growth in Air Force requirements. Full funding of validated replenishment spares requirements will continue to remain a high readiness priority for the FY 1985 budget.

Table III.L.1

Peacetime Operating Spares Procurement ($M)
(Repairable Items)

| | FY 1981 | FY 1982 | FY 1983[1] | FY 1984[1] |
|---|---|---|---|---|
| Army | | | | |
| (Initial) | 524 | 601 | 792 | 1,129 |
| (Replenishment) | 305 | 474 | 599 | 704 |
| Navy | | | | |
| (Initial) | 716 | 951 | 1,069 | 1,208 |
| (Replenishment)[2] | 787 | 785 | 1,144 | 1,316 |
| Marine Corps | | | | |
| (Initial) | 16 | 34 | 37 | 41 |
| (Replenishment) | 7 | 40 | 48 | 42 |
| Air Force | | | | |
| (Initial) | 622 | 823 | 1,097 | 1,617 |
| (Replenishment) | 1,706 | 2,438 | 2,466 | 3,201 |
| DoD Total | | | | |
| (Initial) | 1,878 | 2,409 | 2,995 | 3,995 |
| (Replenishment) | 2,805 | 3,737 | 4,257 | 5,263 |

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[1] Subject to change based on Service distribution of approved funding.

[2] FY 1981 replenishment spares for Navy includes only half-year funding for shipboard depot-level repairable spares. In the last half of FY 1981 and ensuing years, these spares are procured through the Stock Fund and are not included here.

### (b) Consumable Spare Parts

Consumable spare parts are used in the depot and intermediate maintenance programs to fix faulty components and by the organizational level of maintenance directly on the users' equipment. Although most consumable items have low unit costs, a shortfall of these items can cause weapon system downtime either directly at the organizational level or indirectly at the intermediate or depot level. Therefore, consumable item requirements have an importance equal to repairable spares procurement and depot level repair funding to provide balanced supply support. The old adage "for want of a nail..." aptly describes the critical importance of consumable items to weapon system readiness.

Most consumable spare parts are financed by DoD stock funds. Stock fund procurements are approved and controlled by the Office of the Secretary of Defense (OSD) and the Office of Management and Budget (OMB) by means of apportionment control and obligation authority issued to the Services and Defense Agencies in amounts sufficient to support demands and replenishment of authorized stock levels. However, for the past few years our weapon system-related stock funds have struggled to maintain sufficient inventories in the face of increasing procurement lead-times, price escalations, force structure increases, and new and modernized weapon systems. To help provide the required stock fund inventories, the FY 1984 proposed budget includes $2.2 billion to procure the additional items needed to support the force modernization, force expansion, and readiness initiatives scheduled for FY 1985-86. Failure to fund these requirements fully will adversely affect materiel readiness and delay scheduled weapon system maintenance and modification programs. New budget authority for each Service's stock fund inventory build requirement is shown in Table III.L.2.

Table III.L.2

Stock Fund Peacetime Inventory Build Requirements
($ in Millions)

| | FY 1983 | FY 1984 |
|---|---|---|
| Army | 0 | 154 |
| Navy | 230 | 636 |
| Marine Corps | 0 | 0 |
| Air Force | 51 | 1,456 |
| Defense Logistics Agency | 0 | 0 |
| DoD Total | 281 | 2,246 |

### (3) Depot-Level Repair Funding

Depot-level repair funding and backlogs for missiles, ground combat vehicles, ships, engines, airframes, and repairable components can significantly influence materiel readiness. As noted earlier, repaired components are available faster, and are generally cheaper, than new procurement and have a direct and near-term influence on weapon system availability. The Department continues to strive toward its goal of fully funding depot maintenance requirements. The depot maintenance program included in the FY 1983 President's budget provided for the full funding of requirements verified at the time the budget was formulated. Later (higher) requirements, coupled with FY 1983 Congressional funding reductions, will leave us with a depot maintenance backlog at the end of FY 1983. The FY 1984 program contains significant increases in funding for depot maintenance programs. Despite these increases, modest financial backlogs of maintenance can be anticipated to remain throughout FY 1984. Such backlogs do not represent a departure from the Department's goal of fully funding depot maintenance requirements where feasible, but rather represent the impact of limited resources and the realities of the hard program choices that must be made within constrained resource levels.

### (4) Aircraft Materiel Readiness

For aircraft, we often use mission-capable (MC) rates as an important measure of materiel readiness. Aircraft MC rates are, in part, a function of the proposed FY 1984 budget and previous years' funding. Actual rates for FY 1980-82 are shown in Table III.L.3

Table III.L.3

Average Mission-Capable Rates (%)

| | Actual | | |
|---|---|---|---|
| | FY 1980 | FY 1981 | FY 1982 |
| **Army** | | | |
| All | 74 | 74 | 73 |
| (AH-1) | 74 | 75 | 73 |
| **Navy/Marine Corps** | | | |
| All | 59 | 59 | 63 |
| Fighter/Attack[1] | 53 | 53 | 56 |
| **Air Force** | | | |
| All | 66 | 65 | 67 |
| Fighter/Attack[2] | 62 | 65 | 66 |

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1/ Includes A-4s, A-6s, A-7s, AV-8s, F-4s, and F-14s.
2/ Includes A-7s, A-10s, F-4s, F-15s, F-16s, and F-111s.

### (5) Ship Materiel Readiness

The FY 1984 budget continues to fund organizational and intermediate level maintenance, including the Commercial Industrial Services (CIS) program used to accomplish "overflow" intermediate maintenance requirements. The number of ships overdue for overhaul will be 13 in FY 1983 and 13 in FY 1984. Operational commitments rather than lack of funding cause most of this backlog.

Funds requested for the Ship Support Improvement Plan (SSIP) in FY 1984 will be applied to programs directly affecting fleet readiness, such as development and implementation of the life-cycle support system for the progressive overhaul concept of the Lo-Mix ships, FFG-7, and PHM-1 classes, and development, implementation, and continuation of surface ship Engineered Operating Cycle (EOC) programs. Approximately 100 surface ships of eight combatant and non-combatant ship classes will have entered EOC programs by the beginning of FY 1984. During FY 1984, we will expand these programs to include the LHA-1 and AOR-1 classes and the first of the new ships in the CG-47 class. Engineering development for future implementation of EOCs is being completed for the LPH-2 and AE-26 classes, and program development is being undertaken for the CGN-36/38-class ships in FY 1984.

Under the Intermediate Maintenance Activity Upgrade Program, we will commence improvement of the Shore Intermediate Activities at Pearl Harbor, and accomplish the second increment of the improvement program at San Diego. Construction is scheduled to be completed at five other locations in FY 1984, with installation of equipment to follow. These improvements are essential for fulfilling current and future maintenance requirements.

Ship materiel readiness is measured in terms of Command Operationally Ready (COR) rates. COR rates are based on inventories, the average number of units in programmed maintenance, historical trends, and estimates of system availability. Actual rates for FY 1981-82 are shown in Table III.L.4.

Table III.L.4

Ship Materiel Readiness Performance (%)

| | Actual | |
|---|---|---|
| Ship Category | FY 1981 | FY 1982 |
| Submarines | 73 | 68 |
| Aircraft Carriers | 68 | 65 |
| Battle Group Combatants | 71 | 68 |
| Non-Battle Group Combatants | 70 | 76 |
| Amphibious | 72 | 70 |
| Mobile Logistics | 80 | 71 |
| Mine | 74 | 75 |
| Patrol Combatants | 75 | 78 |
| Materiel Support | 71 | 74 |
| Fleet Support | 71 | 72 |

### (6) Ground Forces Materiel Readiness

The FY 1984 budget continues an important procurement program to correct long-standing deficiencies in stocks of principal equipment end-items in Army and Marine Corps units, as illustrated in Tables III.L.5 and III.L.6.

### TABLE III.L.5

### Stocks of Selected Equipment End-Items (Army)

| | | Projected | | |
|---|---|---|---|---|
| | Objective for FY 1988 | Assets End FY 1983 FDP [1] | Assets End FY 1984 FDP | Assets End FY 1988 FDP |
| Medium Tanks | 17,748 | 12,931 | 13,564 | 15,811 |
| Armored Personnel Carriers | | | | |
| FVS | 16,851 | 1,700 | 2,300 | 6,370 |
| M113[2] | 25,312 | 19,800 | 20,852 | 20,852 |
| Self-Propelled Artillery | 4,188 | 3,293 | 3,417 | 3,955 |
| 5-Ton Trucks | 73,631 | 43,783 | 46,443 | 57,533 |

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[1] Funded Delivery Period.

[2] Comprises M113, FISTV, ITV, and M577.

### TABLE III.L.6

### Stocks of Selected Equipment End-Items (USMC)

| | | Projected | | |
|---|---|---|---|---|
| | Objective for FY 1988 | Assets End FY 1982 FDP [1] | Assets End FY 1984 FDP | Assets End FY 1988 FDP |
| Medium Tanks | 788 | 646 | 716 | 716 |
| Landing Vehicles, Tracked | 1,405 | 986 | 1,313 | 1,313 |
| Light Armored Vehicles | 744 | 60 | 307 | 392 |
| Self-Propelled Artillery | 251 | 184 | 247 | 247 |
| 5-Ton Trucks | 8,067 | 3,939 | 5,405 | 8,067 |
| 5/4-Ton Trucks | 13,197 | 0 | 7,112 | 13,197 |

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[1] Funded Delivery Period.

The Army's rate of recovering and rebuilding unserviceable components, although lower than the Air Force and Navy rates, has improved significantly during the past fiscal year. The Army's Repair Parts Improvement Program is aimed at increasing its repairable return rate to 75%. The Army has already met or exceeded this goal for many classes of components.

Ground forces materiel readiness is often measured in terms of weapon system Fully Mission Capable (FMC) rates. FMC performance for selected categories of land equipment in Army and Marine Corps units is illustrated in Tables III.L.7 and III.L.8.

Table III.L.7

Ground Forces Readiness Performance (Army) (%)

| Weapon System | Actual<br>FY 1981 | <br>FY 1982 |
|---|---|---|
| Tracked Combat Vehicles | 86 | 85 |
| Tanks | 86 | 87 |
| Artillery/AD Guns/ Mortars | 88 | 88 |
| Missiles | 91 | 92 |

Table III.L.8

Ground Forces Readiness Performance (Marine Corps) (%)

| Weapon System | Actual<br>FY 1981 | <br>FY 1982 |
|---|---|---|
| Tracked Combat Vehicles | 83 | 82 |
| Tanks | 84 | 88 |
| Artillery | 88 | 86 |
| Guided Missile Systems | 93 | 93 |

b. Materiel Sustainability

(1) War Reserve Materiel

Beyond readiness, we are also concerned about combat sustainability -- the staying power necessary for our forces to balance the Soviets' ability to endure a prolonged conventional conflict. Sustainability is a function of our ability to resupply weapons, equipment, secondary items, munitions, and fuel to replace those resources consumed or attrited during combat operations. These resources are called War Reserve Materiel (WRM) because they are the additional inventories, above the levels needed to support peacetime operations, procured to support the much higher anticipated wartime activity levels and loss rates. To support a force indefinitely, these stocks must be sufficient to last until the production base can satisfy the demand.

WRM requirements (called stockage objectives) are developed by each Service based on programming and planning assumptions that pertain to the specific theater of operation. Factors considered include expected materiel consumption, combat intensity and duration, force and materiel attrition, resupply delays, and host and allied nation support. WRM stockage objectives are expressed both in terms of the number of days supply we need to have prepositioned in the theater, and how much we need to hold in reserve for resupply. We measure sustainability by comparing our stockage objectives against resource availability -- current and projected.

As was the case with readiness, the enhancement of materiel sustainability continues to be a key theme in this administration's defense program. Unfortunately, due to past neglect the road to achieving that goal is a long and expensive one. Our program for FY 1984 contains about $12 billion for war reserve spares, fuel and tactical munitions. Other priority needs compel us to fund a substantial portion of the remaining requirement in FY 1986-88, with funding in FY 1987 growing to $24B.

In the following paragraphs, I will identify selected categories of materiel that contribute to combat sustainability, and illustrate current and projected funding to improve our sustainability in each area.

### (2) Prepositioned War Reserve Equipment and POMCUS

Both the Army and the Marine Corps possess and continue to procure combat attrition replacement assets for major items of ground force equipment such as tanks, armored personnel carriers, and artillery pieces. The Air Force has also undertaken an extensive program to preposition WRM in Southwest Asia and Europe. Assets that consume large amounts of airlift or that are required in the early days of a crisis were selected for prepositioning.

### (3) War Reserve Munitions

Our stockpile of war reserve munitions remains in transition from the older, Vietnam-era munitions to a new generation of much more effective munitions necessary to help offset the numerical superiority of our potential adversaries.

The munitions procurement program for FY 1984 is illustrated in Table III.L.9. Also shown is the funding for the past three years.

Table III.L.9

Munitions Procurement [1]
($ in Millions)

| | FY 1981 | FY 1982 | FY 1983 | FY 1984 |
|---|---|---|---|---|
| Army | 2,403 | 3,525 | 4,300 | 4,216 |
| Navy | 1,471 | 1,864 | 2,327 | 3,550 |
| Air Force | 485 | 1,237 | 1,379 | 2,909 |
| Marine Corps | 82 | 324 | 630 | 494 |

---

[1] Includes both WRM and training munitions.

### (4) War Reserve Secondary Items

Secondary items include repairable components, consumable repair parts, personnel support items (e.g., uniforms and combat rations), and a myriad of other generally low-cost consumable items. Almost everything that is not a weapon system, major equipment, or a munition is a secondary item. The vast majority of the approximately 3.8 million different items in the DoD supply system are classified as secondary items. Of those, about 200,000 have been identified as crucial enough to our combat capability to justify maintaining war reserve inventories of them. Although secondary items account for a relatively small part of the dollar value of our total war reserves, shortages can severely degrade our combat capability and can be as important as shortfalls in major equipment and munitions.

The inventory status of WRM spare parts is a particularly critical part of the sustainability equation. The funding improvements in this area have been noteworthy. For FY 1984, we are proposing about $1.6 billion for WRM spare parts -- more than twice the FY 1981 funding level.

Table III.L.10 illustrates the Services' funding for war reserve secondary items and spare parts.

Table III.L.10

War Reserve Secondary Items/Spare Parts Funding 1/
($ in millions)

| | FY 1981 | FY 1982 | FY 1983 2/ | FY 1984 2/ |
|---|---|---|---|---|
| **Army** | | | | |
| Spare Parts | 48.0 | 220.3 | 496.2 | 483.6 |
| Other Secondary Items | 13.7 | 67.0 | 110.1 | 198.2 |
| Total | 61.7 | 287.3 | 606.3 | 681.8 |
| **Navy/Marine Corps** | | | | |
| Spare Parts | 0.3 | 22.7 | 172.7 | 100.8 |
| Other Secondary Items | -- | -- | 28.3 | -- |
| Total | 0.3 | 22.7 | 201.0 | 100.8 |
| **Air Force** | | | | |
| Spare Parts | 739.3 | 981.1 | 420.2 | 1,041.5 |
| Other Secondary Items | 24.1 | 70.4 | 82.0 | 142.9 |
| Total | 763.4 | 1,051.5 | 502.2 | 1,184.4 |
| **Total** | | | | |
| Spare Parts | 787.6 | 1,224.1 | 1,089.1 | 1,625.9 |
| Other Secondary Items | 37.8 | 137.4 | 220.4 | 341.1 |
| Total | 825.4 | 1,361.5 | 1,309.5 | 1,967.0 |

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1/ Includes stock fund and procurement accounts.
2/ Subject to change based on Service distribution of approved funding.

### (5) Petroleum, Oil, and Lubricants (POL)

One of our biggest sustainability shortfalls is the shortage of POL. To correct this deficiency we are placing renewed emphasis on validating requirements and obtaining additional POL resources and and storage facilities. This past year we published a directive that establishes, for the first time, specific policy guidance on requirements determination and management of bulk petroleum war reserves. We then conducted an extensive review of our stated war reserve fuel requirements to ensure the credibility of the process by which they were established. With this validation in hand, we are now addressing various options and alternatives to overcome our shortfalls. Our intent is to pursue a program that covers our requirements at the lowest possible cost commensurate with an acceptable degree of risk. The program will be a mix of assets in military-owned storage, NATO and allied government facilities, and leased commercial storage, as well as stocks to be provided under host nation support agreements.

#### (6) Water Support

Water support is vital to the forces deployed to arid environments, such as we would encounter in Southwest Asia. Equipment and facilities are required for water production, treatment, storage, distribution, cooling, and force structure support. The Army, as DoD Executive Agent for Land-Based Water Resources, is developing the concepts, doctrine, and force structure to support rapid deployment force operations. Resources to support near-term requirements were provided by the FY 1981 and FY 1982 budgets. Our FY 1984 budget continues this build to allow us to meet our long-term objective by FY 1989.

### c. Installation Support

Support for Department of Defense installations includes replacement and modernization of obsolete facilities; maintenance and repair of existing facilities; construction of new facilities; improvements to operating efficiency; and compliance with environmental, safety, and occupational health standards.

#### (1) Improving Working and Living Conditions at Existing Installations

##### (a) Military Construction Program

Many of our people are working and living in old, crowded, and obsolete buildings that affect our readiness, cause low morale, and detract from our efforts to retain valuable personnel. In FY 1984, we have continued our emphasis on improving conditions for our troops overseas, with an emphasis on housing for both families and unaccompanied personnel, dependent schools, community support, and operational and training facilities.

##### 1. Europe

In Europe, many wartime operational facilities are funded by the NATO Infrastructure Program. The U.S. contribution to this multi-nation construction program will be $300 million in FY 1984. The funds will help support high-priority initiatives such as theater nuclear force modernization and the Long-Term Defense Program. Projects that are not eligible for NATO funding will cost roughly $1 billion in FY 1984. They include unaccompanied housing and dining facilities ($124 million), family housing ($136 million), schools ($91 million), community support ($50 million), and operational and other facilities ($696 million).

##### 2. Other Overseas Areas

In FY 1984, about $660 million is needed for construction to support our troops assigned to other overseas areas. Most of these funds will be spent in the Pacific theater. Although the Japanese and Korean governments both help meet our construction requirements, we plan on spending about $238 million for our forces in these areas.

### (b) Real Property Maintenance Activities (RPMA)

The RPMA program provides funds for a host of functions related to the operation and maintenance of our real property facilities, including maintenance and repair, minor construction, utility systems, and other engineering services. The condition of our facilities has been steadily declining during the past two decades because of inadequate funding, inflation, and the growing age of plant assets. However, in FY 1983 we plan on spending about $3.3 billion for real property maintenance. While this level of funding will not entirely meet our recurring requirements, the dollar value of our backlog of maintenance and repair (BMAR) will decline because of improvements in foreign currency exchange rates. In FY 1984, we are requesting approximately $3.8 billion for real property maintenance. This funding will allow us to cover our recurring requirements and bring about a slight reduction in the BMAR.

### (c) Pollution Abatement

We continue to identify corrective projects required to comply with all environmental laws. As the Environmental Protection Agency (EPA) and the states fund improvements to regional municipal wastewater treatment facilities, DoD installations are required to provide their fair share. The FY 1984 budget includes $48 million for these facilities and requests $20 million for industrial and domestic waste-water treatment on DoD installations. One new category of facility this year is hazardous waste storage, required by the Resource Conservation and Recovery Act (RCRA). DoD components are also continuing studies to identify sites where hazardous wastes were disposed of improperly to determine if abatement projects are required.

### (d) Prevention of Accidents and Occupational Illnesses

We must reduce the accidental loss of material resources and the incapacitation of people due to injuries and work-related illnesses. The FY 1984 Budget contains funding to correct serious workplace and defense systems hazards and to strengthen occupational health training and surveillance.

## (2) Establishing Installations for New Missions

### (a) Peacekeeper

The FY 1984 Military Construction Program includes $449 million in support of the Peacekeeper weapon system. This includes $39 million for planning and design, $11 million for access roads, $20 million for family housing, and $379 million for the first increment of land acquisition and facility construction in support of deployment of the Peacekeeper in a permanent basing mode.

### (b) GLCM

One of the highest operational priorities in the NATO theater is the deployment of the Ground Launched Cruise

Missile (GLCM). Operational facilities are being funded by NATO while land and utilities connections are paid for by the host nations. This year's request of $172 million is for U.S. personnel support facilities ($148 million) and family housing ($24 million). These support facilities constitute an essential component of the U.S. commitment, since they clearly demonstrate our resolve to deploy GLCM on a permanent basis, should it be necessary, and they provide our people the quality of life they deserve.

### (c) Rapid Deployment Forces

The FY 1984 military construction request includes approximately $230 million for strategic facilities in the Indian Ocean/Persian Gulf area; $441 million and $335 million were approved in FY 1982 and FY 1983, respectively.

## (3) Increasing Efficiency

### (a) Property Sales Relocations and Consolidations

This Department is by far the largest single user of federal real property. As such, we can provide many of the assets necessary for the success of the President's property initiative, while at the same time improving our own efficiency through economical consolidations and relocations. In the past, however, attractive opportunities for such actions have not been pursued due to an inability to provide necessary relocation and replacement costs. I am proposing legislation that would allow the Defense Department to recoup these costs and permit us to retain a small portion of the proceeds from sales to encourage further efficiencies. At least 95% of the net sales proceeds would be returned to the Treasury to reduce the national debt.

### (b) Base Operations Support (BOS)

The Department has three major BOS programs to save money and manpower, improve efficiency, and increase readiness.

The Commercial Activities program requires certain segments of the in-house work force to compete with the private sector for performing base support services. Service contracts are then awarded to the lowest bidder. In cases where support services must be provided by a government work force, our Efficiency Review program analyzes task requirements and manpower utilization to ensure the most efficient use of available resources. The Defense Retail Inter-service Support program eliminates the duplication of base support services by consolidating functions common to more than one Service at a single installation under one manager. Altogether, we expect that the above programs will make 9,200 manpower spaces available for higher-priority work loads and will save over $100 million.

### (c) Energy Conservation

The Department of Defense is working toward compliance with the National Energy Conservation Policy Act, which requires that all cost-effective conservation retrofit actions for existing facilities be accomplished by 1990. Of equal importance is the objective of providing permanent retrofits, which will significantly reduce our long-term energy costs and improve the mission support capabilities of our installations. The Congress appropriated over $955 million for this program from FY 1976 through FY 1983, with an overall average amortization period of less than five years. The FY 1984 investment of $133 million for military construction and family housing will result in a permanent annual energy cost savings of over $26 million, with an average amortization period of five years. Despite these investments, we have experienced in the past year a slight increase in facility energy consumption. This increase, we believe, is in large measure due to increased readiness and operational activities. We are initiating a thorough analysis of this increase to determine its exact causes, and will take action, as appropriate, to correct any problems we find.

### d. Logistics Management Support

#### (1) Supply Programs

I have established a Supply Management Policy Group which includes representation from my staff, the Military Services, and the Defense Logistics Agency. This group is working toward the development of logistics management policies and procedures that will lead to the measurement of supply performance on the basis of weapon system availability. Such policies and procedures will help us meet our targets for operational availability of weapon systems while keeping inventories of spares at the minimum required level.

We are implementing a program to introduce the use of bar-code markings in the DoD distribution system. Virtually all procurement contracts now require that incoming material be bar-coded. We will use existing computers to process the bar-code information and maintain logistics data bases. We estimate that annual savings resulting from improved inventory control and materiel processing will exceed $100 million once these procedures are fully implemented. We have also begun to seek additional savings by using bar codes to reduce paperwork and streamline document processing associated with the storage, accountability, and distribution of material and property.

#### (2) Maintenance Program

Maintenance of our weapon systems and related equipment requires significant resources -- including more than $24 billion annually and the efforts of more than 800,000 government and contractor personnel throughout the world.

Several major program initiatives are under way to accomplish this maintenance as efficiently and effectively as possible. The DoD Maintenance Policy Council (MPC) has been established to provide an executive-level forum for the examination of DoD maintenance plans, policies, and procedures to improve the efficiency and effectiveness of maintenance operations. Under the auspices of the MPC, actions are under way to increase the use of interservice maintenance support, modernize equipment to improve efficiency, and establish comparable aeronautical depot maintenance management information systems among the Services.

We are in the process of formulating policy relative to Post Production Support (PPS). The objective of the PPS program is to assure that spare parts, maintenance, test equipment, trained personnel, and other support requirements are available at reasonable cost throughout the period after production close-out of weapon systems and related equipment.

DoD is continuing to expand the application of Reliability Centered Maintenance (RCM). RCM is the DoD adaptation of a maintenance strategy developed by the commercial airlines to reduce maintenance expenses and increase operational availability without sacrificing safety or operating reliability. RCM has been successfully applied to ships, aircraft, engines, and combat vehicles, as well as to various subsystems, avionics systems, and ground support equipment. The Air Force completed initial analysis of all major engines and airframes in FY 1981. Research continues on application of RCM to communications-electronic systems and Army aircraft.

We have begun the DoD Logistics Civilian Career Management Program to improve the selection, recruitment, education and training, and career development of DoD personnel who support and manage DoD maintenance and other logistics programs. The Air Force, through its related program, has recently established a career development panel to assist in the management of long-term, full-time training and career-broadening assignments of its logistics personnel.

### (3) Transportation and Traffic Management

We have included an extensive review of transportation programs in the Mobility chapter. The following management initiatives explain important transportation programs not covered in that chapter.

On 5 October 1981, we established Military Export Cargo Offering and Booking Offices (MECOBOs) worldwide by consolidating the sealift cargo management functions of the Army's Military Traffic Management Command (MTMC) and the Navy's Military Sealift Command (MSC). These offices have reduced the time required to process sealift bookings by 25%, eliminated excess paperwork, and improved the management of intermodal container shipments. Annual savings of $5 million per year are projected.

The JCS have recommended unanimously that a new unified Military Transportation Command (MTC) be established under the Joint Chiefs. This new command is urgently needed to correct the coordination problems we currently have in the management of surface transportation in peace and war. I am working with the Armed Services Committees to resolve remaining differences regarding implementation of the JCS plans for the MTC.

### (4) Productivity Enhancement

Authority was provided to industrial fund managers in FY 1983 to purchase modern labor-saving equipment through the industrial fund rather than through direct appropriations. This reflects a continuing effort to reduce the cost of repair by modernizing our equipment maintenance base.

DoD also fosters a range of programs directed at improving the productivity of other activities. These programs provide financing for capital equipment and facilities to improve the productivity of support operations. They include small dollar labor and cost-saving equipment as well as major operational improvements. One of these investments, LOGMARS, employs state-of-the-art machine-readable symbology or bar-coding to improve the productivity, timeliness, and accuracy of a broad range of DoD Logistics operations. This specific project is expected to return almost $17 for each dollar invested over its economic life in supply, maintenance, and base operations. In FY 1984, DoD will reap $8 million in benefits from LOGMARS. This savings will increase to $112 million through FY 1988.

### (5) Host Nation Support

Host nation support (HNS) is designed to complement forward-deployed and reinforcing U.S. combat and support forces to provide the logistics support necessary to give our combat units effective combat power. It represents a critically important step to improve our conventional warfighting capability in Europe, in Southwest Asia, East Asia, and the Pacific. HNS is necessary because the U.S. has severe force structure shortages in the combat service support units -- largely logistic units -- that give our forward-deployed and early-reinforcing combat units their sustained combat capability. HNS is designed to ensure this critically needed support without further straining U.S. resources.

The principle underlying the concept of HNS is that our allies can provide needed support from their civil sectors and military establishments at a small fraction of the cost were the U.S. to provide comparable service. Our HNS arrangements with our European Allies are discussed in the NATO chapter. The Republic of Korea and Japan also provide host nation support for U.S. combat forces. These programs will enable us to improve the readiness and deployability of U.S. forces while reducing costs and manpower requirements for logistics functions that can reasonably and assuredly be provided by host nations.

### (6) Deployable Hospitals

Our emphasis on repairing equipment must be matched by at least an equal effort to "repair" and keep in sound condition those people we depend upon to use that equipment. Therefore, the achievement of an adequate wartime medical capability is of the highest priority. The deployable hospitals that the Services have on hand today could provide care to no more than one in five of our wounded in the event of a conventional war in Europe, and to fewer than one in ten of our wounded in the event of war in Southwest Asia or Korea. The first large procurements of deployable hospitals were funded by the Congress in FY 1983, and additional funds are requested in FY 1984. These procurements, together with expanded procurement programs in FY 1985 and FY 1986 and the acquisition of the essential hospital ship capability, will provide an adequate theater medical capability by end-FY 1987.

We have also taken steps to improve inter-Service coordination in the development of field medical systems. Through a new standardization process, deployable hospital programs will be coordinated among the Services and the Office of the Assistant Secretary of Defense (Health Affairs). On 21 June 1982, we issued a Department of Defense Instruction governing the standardization of field medical systems. The Instruction requires the Services to procure only those systems that have been developed under the direction of the Military Field Medical Systems Standardization Steering Group and approved by each of the Services, with final approval by the Assistant Secretary of Defense (Health Affairs).

### (7) Air Force European Distribution System (EDS)

In FY 1983, we requested funding to begin implementing EDS. This Air Force program is a logistics readiness-sustainability initiative that provides a significant increase in operational fighter aircraft each day in a European war by assuring the timely distribution of the critical logistics assets needed to return grounded fighter aircraft to service. Our FY 1984 budget request includes the remaining light transport aircraft for one squadron and military construction support facilities. This will complete funding for this logistics system in Europe.

## 3. Conclusion

This Administration is dedicated to improving our currently inadequate logistics posture. Force readiness and sustainability are the two areas we have identified that require our highest-priority attention. My assessment of the progress we have made toward accomplishing this objective is one of cautious optimism.

I am optimistic because we made a good start and are moving in the right direction. The FY 1981 and FY 1982 budgets constituted an important beginning with the addition of about $12 billion to improve the readiness and sustainability of our existing forces. This funding will be further increased in FY 1983 and FY 1984. Our FY 1984 budget request will result in funding levels for readiness and sustainability nearly 40% higher (in real terms) than FY 1980, the final year of the last Administration. Because of production leadtimes and the time it takes for the equipment, munitions, and spares to work their way through the system, we have not seen the full effect of this increased funding on materiel readiness. However, significant improvements are already evident in several areas.

-- Since February 1981, the number of combat ready active units has increased by almost one third. At the same time, the number of not-combat ready units has declined by almost one half.

-- Mission-capable rates for Navy, Marine Corps, and Air Force aircraft have improved. The Navy and Marine Corp expect continued improvement through FY 1986.

-- Ship overhaul backlogs have been reduced; most remaining backlogs are the result of operational schedule conflicts rather than a shortage of overhaul funds.

-- Operating tempos for non-deployed fleets are being increased in FY 1984 to support training and readiness.

-- We have a five-year program that will improve our sustainability posture significantly. Largely due to our funding increases in FY 1981 and FY 1982, our days of munitions supply in FY 1983-87 should be about 10% greater than they would have been under the previous Administration's plan. By the time the FY 1984 budget procurement is delivered, the war reserve stockpiles of munitions and spares will have increased about 25% over the FY 1981 funded delivery period. After execution of the out-year (FY 1985-88) program as it now stands, these stockpiles will have increased by another 40-50%.

On the other hand, my optimism is somewhat guarded because we have not yet reached our goals in several areas. As I pointed out, we will have to accept some readiness funding deficiencies in FY 1984 and delay some sustainability funding until FY 1986-88. But this does not mean that we have lessened our resolve to build a strong and effective logistics support posture. Obviously, we cannot undo a decade of neglect in one or two years. Our goals are ambitious, and as we struggle with growing and increasingly complex support requirements, we will continue to pursue high standards in both performance and efficiency. We are striving to get the best military capability possible for each tax dollar. Our combat forces are improving each day, and our emphasis on materiel readiness and sustainability will help to ensure that this improvement continues.

## M. SECURITY ASSISTANCE

### 1. Introduction

### a. Objectives

The security assistance program is an essential complement to the overall U.S. defense effort. When we directly assist other nations in meeting their defense requirements, we also make a contribution to our own security. Security assistance must be carefully tuned to U.S. global and regional strategy objectives. For instance, the security assistance program supports our efforts to obtain the access, overflight, and base rights the Defense Department needs abroad. Furthermore, this program helps us move toward greater equipment standardization and interoperability, which enables friends and allies to move, shoot, and communicate with U.S. forces in coalition warfighting situations.

The security assistance program is not a giveaway. Almost all the financing for foreign military sales, the Economic Support Fund, and the funds for International Military Education and Training are spent in the U.S. Thus, the program has economic benefits associated with economies of scale, production line smoothing, expansion of the defense industrial mobilization base, and expanded pipeline availability. Security assistance program requirements also can be the medium for maintaining a production capacity-in-being for current front-line systems that are being replaced, while the new production capability is coming on line. For these reasons, we are urging a larger, more flexible, and more fully manned security assistance program.

### b. Trends in Security Assistance

Security assistance has historically played a prominent role in U.S. foreign and defense policy. Virtually all major international events involving the U.S. since World War II have included our providing security assistance to countries on the front lines of conflict -- from European rearmament after the war, to the defense of Southwest Asia in more recent times. Most countries participating in the program have done so for many years.

#### (1) Recent Evolution of Security Assistance Programs

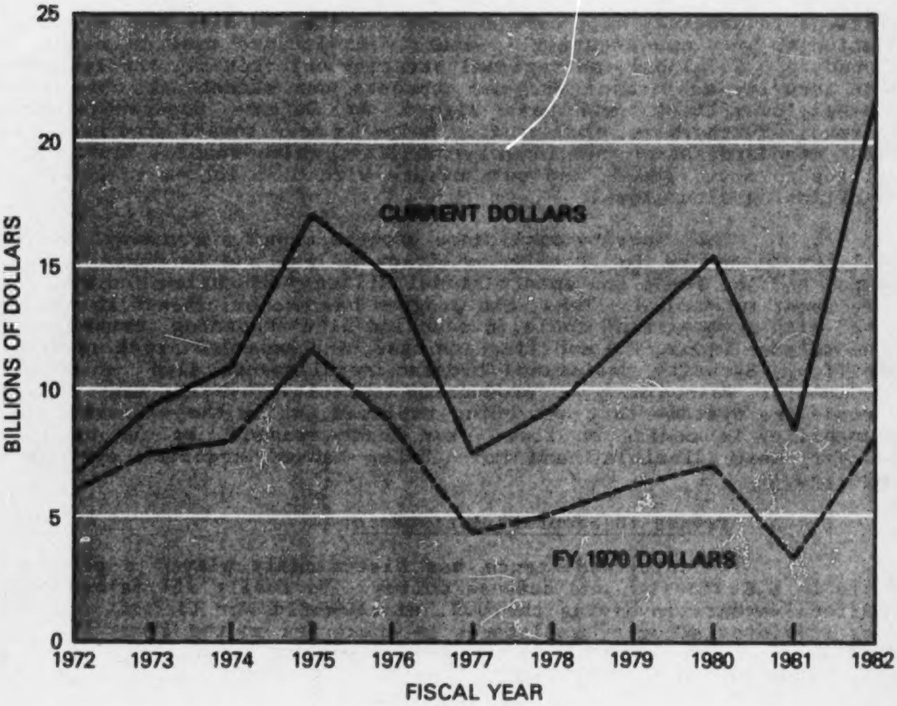
During the past decade, there has been little real growth in the monetary value of security assistance, including arms transfers, as can be seen in Chart III.M.1. The dollar value of U.S. transfers and the number of major weapon systems supplied to foreign governments have not risen in real terms. Although the value of U.S. arms transfers has been increasing in current dollar terms, this has not translated into equivalent increases in equipment transfers.

#### (2) Future Trends

The low level of U.S. financing, the stiff terms of that financing, the high cost of military equipment, and weaknesses in the international economy will inhibit or delay certain countries from seeking new military procurements. Other major suppliers can provide alternatives to U.S. assistance; however, given the quality of our equipment, the continuity of our support, and the quality of our training, plus a strong desire by many countries to be associated

Chart III.M.1

## U.S. MILITARY SALES AND GRANTS WORLDWIDE



with the U.S., the worldwide demand for U.S. security assistance will continue. We expect that our ability to respond to these countries' needs will, in the face of chronic economic shortfalls abroad, require more grant and concessional funding.

Overall, we foresee the need for a steady growth in security assistance. At the same time, we will need more and better planning with foreign governments to make best use of scarce resources to achieve sensible defense postures. Situations such as the conflict in Lebanon last year will also create the need for new or expanded programs. We need to improve our flexibility to respond to these continually arising situations. We may also propose creative approaches to meeting our funding and equipment requirements.

### (3) Soviet Security Assistance Activities

The U.S. is not the leading arms supplier in the world. In the past few years, the Soviet Union has matched or exceeded the U.S. in the value of arms sales, in the number of foreign military nationals trained, and in the number of military technicians serving in Third World countries (a 20:1 ratio). Between 1977 and 1981, the Soviets exported far more major weapon systems to the Third World than we did. Some examples are shown in Table III.M.1. These arms, shipped to countries like Syria and Libya, pose major threats to neighboring countries. Although these trends do not mean we should enable countries we support to match their Soviet-equipped antagonists weapon-for-weapon or advisor-for-advisor, they do indicate that we must improve the quality of our programs. As in other defense areas, the qualitative superiority of U.S. security assistance must compensate for quantitative inferiority.

TABLE III.M.1

Soviet and U.S. Arms Deliveries to the Third World

(1977-1981)

| | USSR | U.S. |
|---|---|---|
| Tanks and SP Guns | 7,065 | 3,220 |
| Artillery | 9,570 | 3,155 |
| Combat Aircraft | 2,525 | 955 |
| Surface-to-Air Missiles | 11,680 | 7,860 |
| Helicopters | 910 | 225 |

SOURCE: Conventional Arms Transfers in the Third World, 1972-81. August 1982, U.S. Department of State

## 2. FY 1984 Program

### a. DoD-Administered Programs

The Secretary of State, under the guidance and direction of the President, has the statutory responsibility to determine the direction and extent of the annual security assistance program and to provide supervisory control of each program area. This includes integrating security assistance programs and foreign sales with other defense and foreign policy actions and objectives. For its part, the Defense Department must release equipment, provide for production, and implement the program. Moreover, as we have said, the security assistance program dovetails with our national security objectives and strategy. Therefore, the Defense Department has a vested interest in the program.

The Department of Defense administers the following programs:

### (1) Military Assistance Program (MAP)

MAP provides defense articles and services, other than training, to eligible governments on a grant basis. This program was being phased out. However, some grant funds were made available by Congress in FY 1982 and FY 1983, and we furnished these to economically hard-pressed countries important to U.S. security interests. For FY 1984, we are proposing $650.8 million in MAP funds for more than twenty countries, $46 million for general costs, and a $55 million reimbursement to DoD for grant emergency assistance. We are also proposing $167 million as part of an FY 1983 Supplemental request, $20 million of which would reimburse DoD for past emergency drawdowns.

### (2) Foreign Military Sales (FMS)

Under the FMS program, the Department of Defense sells articles, services, and training to foreign governments on a direct cash basis. At the end of 1982, more than 100 countries (and three intergovernmental organizations) were authorized to procure through this program. A 3% surcharge is added to FMS sales to finance the program.

### (3) Foreign Military Sales Credit Financing

FMS credit financing provides direct credits and guaranteed loans through the Federal Financing Bank (FFB). The latter are guaranteed by the Department of Defense and let at prevailing interest rates. These credits allow recipients to purchase equipment or services from the U.S. government or directly from U.S. contractors. We are recommending $5.4 billion in FMS credits in FY 1984 for more than 40 countries, including $1.0 billion in forgiven credits for Israel ($550 million) and Egypt ($450 million). Eighty-four per cent of the guaranteed credits are proposed for seven countries -- Israel, Egypt, Turkey, Greece, Spain, Pakistan, and Korea. In our FY 1983 Supplemental request, we are proposing $525 million in guaranteed credits to meet critical requirements unfunded in the FY 1983 Continuing Resolution Authority (CRA).

### (4) International Military Education and Training Program (IMET)

Through IMET, the Department of Defense provides training and training support to foreign military personnel as grant assistance. For FY 1984, we are proposing an IMET program of $56.5 million to fund students from more than 80 countries. This is an increase of roughly $11.5 million over the level in the FY 1983 CRA. Another $1 million is being proposed in the FY 1983 Supplemental request.

## b. Programs not Administered by DoD

There are other security assistance programs related to those administered by the Department of Defense but developed and implemented by the Department of State.

The Economic Support Fund (ESF) program is administered by the Agency for International Development (AID) under the direction of the Department of State. ESF is programmed for countries in which we have a special security or political interest, and funds may be designated as either grant or loan assistance. These funds are for direct cash transfers, commodity import transfers, and project assistance. In many cases, they complement ongoing development assistance programs.

Peacekeeping Operations (PKO) funds are administered by the Department of State and enable the U.S. to participate in voluntary multilateral operations set up to manage and reduce conflicts. These include the Multinational Force and Observers in the Sinai, the Multinational Force (MNF) in Lebanon, and the U.N. Force in Cyprus. We are also requesting funds for a program to combat international terrorist activities.

Finally, commercial sales of defense articles and services consist of direct exports by private firms to foreign governments of items approved by the Office of Munitions Control in the Department of State, in coordination with the Defense Department. The value of commercial license approvals has been rising in recent years and actual exports have also increased.

## c. Security Assistance Program by Type

When combined, the total security assistance program request for FY 1984 equals $9.2 billion. Upon the subtraction of guaranteed loans, which are off-budget, this translates into a $4.8 billion request in budget authority terms. These program proposals represent steady real growth over the FY 1982 and FY 1983 CRA levels. Overall, the FY 1984 request amounts to a 17.7% increase over the FY 1983 CRA program levels and a 20% increase in the critical military grant portion (forgiven credits, MAP, and IMET). We are also requesting a Supplemental appropriation of $987.5 million in FY 1983. Less than half ($462.5 million) of this request will be for on-budget funds, the remainder ($525 million) in guaranteed credits. We are proposing $251 million of this request for Lebanon to assist in the modernization of the Lebanese Armed Forces and to ease that beleaguered nation back to normalcy. The remaining funds ($726.5 million) are needed to narrow the gap between known program requirements and the reduced funding levels under the FY 1983 CRA. Table III.M.2 shows the individual program areas.

TABLE III.M.2

Security Assistance Program
(Dollars in Millions)

| | FY 1982 Actual | FY 1983 CRA [1] | FY 1983 Supplemental | FY 1984 Proposed |
|---|---|---|---|---|
| FMS Credit Financing | 3,883.5 | 4,813.0 | 525.0 | 5,436.0 |
| Guaranteed | 3,083.5 | 3,638.0 | 525.0 | 4,436.0 |
| Direct (Forgiven) | 800.0 | 1,175.0 | -- | 1,000.0 |
| MAP | 195.0 | 290.0 | 167.0 [2] | 751.8 [2] |
| IMET | 42.0 | 45.0 | 1.0 | 56.5 |
| ESF | 2,914.0 | 2,661.0 | 294.5 | 2,949.0 |
| PKO | 151.0 | 43.5 | -- | 46.2 |

---

1/ CRA: Continuing Resolution Authority

2/ Includes $55 million for MAP drawdown of DoD articles and services under the provisions of section 506a of the Foreign Assistance Act in FY 1984 and $20 million in the FY 1983 Supplemental.

### d. Security Assistance by Strategic Objectives

The security assistance program has evolved over time on a country-by-country basis. Our decisions to enter a program with a country at any given time are driven by our perceived strategic interests at the time. In the past, we grouped the countries covered by our security assistance request along the usual regional lines. These regional divisions represented the five major nation groupings in the Department of State and the Department of Defense: Europe/NATO, Near East/South Asia, East Asia/Pacific, Inter-America, and Africa. This obscured the strategic goals we have been pursuing and substituted artificial global groupings for policy-based objectives.

Consequently, our FY 1984 request continues the process, established with the FY 1983 request, of explaining the proposal in terms of strategic objectives that often transcend normal regional boundaries. Given the diversity of the international system, it is understandable that we should have multiple goals -- some more pressing than others, some requiring different funding mixes, and others requiring continued but careful nurturing to forestall adverse developments. These strategic objectives are summarized in the following sections.

### (1) Middle East Peace

Our policy in the Middle East is designed to pursue several interrelated objectives. These include the search for a lasting peace among all the states in the region, especially a reduction of the confrontation between Israel and regional Arab states. It also seeks to enhance the security of our friends in the area against regional threats, whether they are local in origin or inspired by Soviet pressures or through Soviet surrogates. In general, our assistance in the Middle East area is predicated on the principle of selfinterest: if states in this region are independent, stable, strong, and moderate in their orientation, our security interests will be enhanced and the Soviets will be denied opportunities to exert their influence in the region.

Funding to further these strategic objectives comprises half of the security assistance proposal and more than half of the FMS credit request for FY 1984. This includes major programs in Egypt ($1.3 billion) and Israel ($1.7 billion). All the forgiven FMS credits would also go to these two countries. About half the Economic Support Funds would also be applied to furthering these objectives.

(2) European Defense

U.S. security assistance to the Mediterranean/Southern Tier countries in Europe/NATO supports our common effort to deter aggression and cope with threats to the Alliance within the larger NATO region and to encourage cooperative efforts in areas of common interest outside the geographic boundaries of the Alliance. Next to North America, Europe remains the most important strategic region for defense planning, since it is on the front line with the Soviet Bloc, and our assistance is necessary to enable member countries to acquire the equipment, training, and other services needed to strengthen the common defense.

Turkey lies at the nexus of our NATO, Southwest Asia, and Middle East strategies and must be assisted accordingly. DoD is proposing an FY 1984 total of nearly $950 million to help Turkey modernize its armed forces. Both ESF and MAP grants for Turkey represent sizable increases over FY 1983. Turkey faces potentially grave security threats from several directions and requires large, well-equipped, and modernized forces to defend its territory and to meet its NATO commitments.

(3) Caribbean Basin Development

The security assistance proposed for the Caribbean Basin countries is designed to complement parallel initiatives in economic assistance and trade incentives. Our programs seek to assist in the development of the kind of security environment in which real sociopolitical progress and economic growth can take place.

In Central America, we are proposing a significant increase over FY 1983 levels. This includes increases in MAP grants for Honduras, FMS credits and MAP grants for El Salvador, and a new FMS credit program for Guatemala. Each country has been forced to cope with the internal and cross-border violence and turmoil that has spread throughout the region.

In the economically troubled Caribbean, our major effort is to provide grant assistance to those nations whose weakened economies make them especially vulnerable to regional and extra-regional pressures. We are proposing a sizable increase over FY 1983, a substantial portion of which is in MAP grants. An ESF proposal for $398 million complements the military assistance.

(4) Southwest Asia/Persian Gulf Self Defense and Access

The energy produced in and exported from this region continues to be the lifeblood of the free world and a key determinant of its growth and stability. Our program recommendation, along with our arms transfers to the more affluent regional states, is based on the need for them to improve their abilities to defend themselves, especially against air attacks, and on the need for continued access to the region. Our security assistance programs with Oman and Somalia are tied closely to agreements covering access to air and port facilities necessary for getting rapid deployment forces to the region in emergencies. We are recommending MAP grants for the Sudan and, outside the immediate region, sizable programs for Morocco and Tunisia, which face chronic threats from Libya or Libyan-equipped forces. Morocco provides crucial en route access to Southwest Asia. This year's portion of our multiyear program with Pakistan ($300 million in credits, $225 million in ESF) will help it to deter Soviet forces in Afghanistan by continuing its military modernization program.

We believe that the $507 million in FMS credits and the proposed increase in MAP grants is the minimum necessary to further these objectives.

### (5) Pacific Defense Efforts

We have had long-standing treaty relationships with several countries in this region, including the Philippines, where our unhampered use of base facilities supports defense objectives both in the Far East and in Southwest Asia. Economic and commercial interests throughout the area remain important to the U.S. and to our friends, and it remains an important task of the U.S. to ensure that the vital sea lanes connecting the Indian Ocean and the Pacific remain open.

More than half our $436.5 million FMS request for the region is earmarked for the force modernization program in Korea ($230 million), with the remaining major programs planned for the Philippines ($50 million), Indonesia ($50 million), and Thailand ($94 million), which faces a spill-over of violence from Vietnamese forces in Kampuchea.

### (6) Southern African Stability

Our security assistance recommendations for Southern Africa are aimed primarily at furthering the peace process in Namibia, ensuring continued access to critical raw materials throughout the region, and assisting Zaire to stabilize its economy (with ESF) and cope with episodic threats from insurgents operating across its borders. Although modest in funding terms (almost $180 million in FMS, MAP, and ESF), the strategic objectives for the region are significant elements in U.S.-African relationships.

### (7) West African Stability

As with our strategy in Southwest Asia, we are seeking to ensure that we and our friends have reliable access to oil from energy exporters in this region. We also plan to assist those countries resisting threats and other pressures from Libya. In the case of Liberia, we are recommending a sizable ESF program ($35 million) to help it through a severe financial crisis.

### (8) Other Strategic Objectives

We are proposing funding for strategic objectives elsewhere, especially in non-industrialized countries in South Asia, Africa, and South America. Several of these countries are in desperate need of both economic and military assistance since they are grappling directly or indirectly with local conflicts and at the same time coping with troubled economies. Many of these states hold potentially vast reserves of untapped mineral resources.

TABLE III.M.3

Security Assistance By Strategic Objective
($ Millions)

| Strategic Objective | FMS/Grant | FMS/Loan | MAP | IMET |
|---|---|---|---|---|
| Middle East | 1,000 | 2,130 | -- | 4.8 |
| Europe | -- | 1,250 | 300 | 11.7 |
| Caribbean Basin | -- | 45 | 114.8 | 5.1 |
| Southwest Asia/ Persian Gulf | -- | 507 | 197 | 10.2 |
| Pacific | -- | 436.5 | 5 | 9.4 |
| Southern Africa | -- | 12 | 10 | 1.9 |
| West Africa | -- | 11 | 19 | 2.8 |
| Others | -- | 45 | 5 | 10.2 |
| Miscellaneous | -- | -- | 101 | 0.4 |
| Totals | 1,000 | 4,436.5 | 751.8 | 56.5 |

### e. Advanced Procurement Planning

### Special Defense Acquisition Fund (SDAF)

The SDAF was established in FY 1982 to enable procurement of high-demand military equipment and services in advance of actual foreign requests. The purpose of the SDAF is to improve the quality of our responsiveness to unanticipated foreign requests and to provide quick deliveries in emergency situations. When fully capitalized, the SDAF will cut down on procurement lead times and minimize the number of drawdowns from U.S. military stocks, thereby reducing adverse effects on the readiness of our own forces.

At present, the SDAF is funded entirely from recoupments of non-recurring RDT&E costs and asset use charges.

Although obligations were limited to only $125 million in FY 1982 and another $125 million in FY 1983, this initial capitalization provides a minimum base for making the SDAF truly effective in the future. We need to expand the sources of capitalization and put our authority to obligate monies from the fund on a continuing basis.

### 3. Conclusion

(U) There are few signs today that the international security environment will improve to the point where our security assistance requirements will decline or even level off in the future. Instead, we anticipate that foreign needs to maintain or modernize military forces will continue, and at greater cost; that our proposals will keep pace with these requirements; and that the grant and/or concessional elements of our funding must expand if we are to be responsive, given the extremely difficult financial and economic situations most of these countries face. Our program funds complement DoD's budget requests, provide revenue returns to the Treasury, are almost all spent in the United States, and further our strategic interests abroad. In terms of costs and of furthering U.S. security interests, critical foreign assistance programs are as beneficial as programs in the defense budget. The Department of Defense is fully committed to steady real growth in security assistance funding because we believe the program is one of our most cost-effective and remains one of the most indispensible instruments for protecting and preserving our national security.

# APPENDIX A

## Excerpts from Previous Annual Reports of the Secretary of Defense Related to "Flexible Response"

"What we are proposing is a capability to strike back after absoring the first blow. This means we have to build and maintain a second strike force. Such a force should have sufficient flexibility to permit a choice of strategies, particularly an ability to: (1) strike back decisively at the entire Soviet target system simultaneously or (2) strike back first at the Soviet bomber bases, missile sites, and other military installations associated with their long-range nuclear forces to reduce the power of any follow-on attack -- and then if necessary, strike back at the Soviet urban and industrial complex in a controlled and deliberate way.

In talking about global nuclear way, the Soviet leaders always say that they would strike at the entire complex of our military power including government and production center, meaning our cities. If they were to do so, we would, of course, have no alternatives but to retaliate in kind. But we have no way of knowing whether they would actually do so. It would certainly be in their interest as well as ours to try to limit the terrible consequences of a nuclear exchange. By building into our forces a flexible capability, we at least eliminate the prospect that we could strike back in only one way, namely, against the entire Soviet target system including their cities. Such a prospect would give the Soviet Union no incentive to withhold attack against our cities in a first strike. We want to give them a better alternative. Whether they would accept it in the crisis of a global nuclear war, no one can say. Considering what is at stake we believe it is worth the additional effort on our part to have this option."

-- FY 1964 Annual Report, January 30, 1963, pp. 28-30.

"If anything, the need for options other than suicide or surrender, and other than escalation to all out nuclear war, it more important for us today than it was in 1960, because of the growth of the capabilities possessed by other powers... The Soviet Union now has the capability in its missile forces to undertake selective attacks against targets other than cities. This poses for us an obligation, if we are to ensure the credibility of our strategic deterrent, to be certain that we have a comparable capability in our strategic systems and in our targeting doctrine, and to be certain that the USSR has no misunderstanding on this point....

But, if for whatever reason, deterrence should fail, we want to have the planning flexibility to be able to respond selectively to the attack in such a way as to (1) limit the chances of uncontrollable escalation, and (2) hit meaningful targets with a sufficient accuracy-yield combination to destroy only the intended target and to avoid widespread collateral damage. If a nuclear clash should occur -- and we fervently believe it will not -- in order to protect American cities and the cities of our Allies, we shall rely into the wartime period upon reserving our "assured destruction" force and persuading, through intra-war deterrence, any potential foe not to attack cities. It is through these means that we hope to prevent massive destruction even in the cataclysmic circumstances of nuclear war."

-- FY 1975 Annual Report, March, 1974, pp.4-5.

"To the Soviet Union, our strategy makes clear that no course of aggression by them that led to the use of nuclear weapons, on any scale of attack and at any stage of conflict, could lead to victory, however they define victory. Besides our power to devastate the full target system of the USSR, the United States would have the option for more selective, lesser retaliatory attacks that would exact a prohibitively high price from the things the Soviet leadership prizes most -- political and military control, nuclear and conventional military force, and the economic base needed to sustain a war. ...Our planning must provide a continuum of options, ranging from small numbers of strategic and/or theater nuclear weapons aimed at narrowly defined targets, to employment of large portions of our nuclear forces against a broad spectrum of targets."

-- FY 1982 Annual Report, January, 1981, pp. 39-40.

# APPENDIX B

TABLE 1

Department of Defense -- TOA by Appropriation

(Dollars in Millions)

| | FY 1972 | FY 1976 | FY 1980 | FY 1982 | FY 1983 | FY 1984 |
|---|---|---|---|---|---|---|
| Current Dollars | | | | | | |
| Military Personnel | 23,147 | 25,430 | 31,065 | 42,829 | 45,485 | 47,946 |
| Retired Pay | 3,889 | 7,326 | 11,920 | 14,940 | 16,155 | 16,806 |
| Operation & Maintenance | 21,242 | 28,848 | 46,605 | 62,011 | 66,817 | 74,005 |
| Procurement | 18,526 | 21,033 | 35,310 | 64,106 | 81,879 | 94,088 |
| Research, Development, Test & Evaluation | 7,584 | 9,520 | 13,499 | 20,103 | 22,805 | 29,622 |
| Special Foreign Currency Program | 12 | 3 | 7 | 3 | 4 | 3 |
| Military Construction | 1,262 | 2,147 | 2,259 | 4,881 | 4,487 | 5,973 |
| Family Housing & Homeowners Assistance Program | 839 | 1,254 | 1,554 | 2,219 | 2,564 | 2,836 |
| Revolving & Management Funds | -- | 135 | -- | 347 | 909 | 2,799 |
| Undistributed | -- | -- | -- | -- | -650 | -- |
| Total - Direct Program (TOA) | 76,502 | 95,695 | 142,219 | 211,438 | 240,455 | 274,078 |
| Constant FY 1984 Dollars | | | | | | |
| Military Personnel | 54,773 | 45,005 | 42,800 | 44,802 | 45,756 | 47,946 |
| Retired Pay | 10,097 | 12,904 | 15,194 | 16,069 | 16,425 | 16,806 |
| Operation & Maintenance | 54,539 | 52,476 | 57,499 | 66,178 | 68,785 | 74,005 |
| Procurement | 46,094 | 40,606 | 46,166 | 71,972 | 86,733 | 94,088 |
| Research, Development, Test & Evaluation | 17,651 | 16,609 | 17,091 | 22,061 | 23,900 | 29,622 |
| Special Foreign Currency Program | 27 | 5 | 8 | 3 | 4 | 3 |
| Military Construction | 3,003 | 3,763 | 2,790 | 5,360 | 4,691 | 5,973 |
| Family Housing & Homeowners Assistance Program | 1,943 | 2,205 | 1,988 | 2,417 | 2,691 | 2,836 |
| Revolving & Management Funds | -- | 245 | -- | 384 | 958 | 2,799 |
| Undistributed | -- | -- | -- | -- | -684 | -- |
| Total - Direct Program (TOA) | 188,127 | 173,818 | 183,534 | 229,248 | 249,257 | 274,078 |

(NOTE: Totals may not add due to rounding.)

## TABLE 2

### Department of Defense -- TOA by Major Force Program

(Dollars in Millions)

| | FY 1972 | FY 1976 | FY 1980 | FY 1982 | FY 1983 | FY 1984 |
|---|---|---|---|---|---|---|
| Current Dollars | | | | | | |
| Strategic Forces | 7,158 | 7,155 | 11,092 | 15,339 | 20,649 | 28,132 |
| General Purpose Forces | 25,518 | 32,851 | 52,417 | 88,058 | 100,850 | 109,587 |
| Intelligence & Communications | 5,452 | 6,671 | 9,122 | 13,939 | 17,057 | 20,842 |
| Airlift & Sealift | 1,114 | 1,262 | 2,121 | 3,954 | 4,189 | 5,194 |
| Guard and Reserve Forces | 3,255 | 5,374 | 7,877 | 10,358 | 11,363 | 11,597 |
| Research & Development | 5,755 | 8,645 | 11,799 | 16,921 | 18,683 | 23,481 |
| Central Supply & Maintenance | 8,663 | 9,714 | 15,316 | 18,717 | 21,290 | 24,122 |
| Training, Medical, Other General Personnel Activities | 15,198 | 21,499 | 29,302 | 39,602 | 42,530 | 45,605 |
| Administration & Associated Activities | 1,737 | 2,260 | 2,531 | 3,643 | 3,081 | 4,833 |
| Support of Other Nations | 2,652 | 264 | 641 | 908 | 763 | 685 |
| Total - Direct Program (TOA) | 76,502 | 95,695 | 142,219 | 211,438 | 240,455 | 274,078 |
| Constant FY 1984 Dollars | | | | | | |
| Strategic Forces | 18,074 | 13,404 | 14,351 | 16,734 | 21,604 | 28,132 |
| General Purpose Forces | 62,507 | 60,954 | 68,469 | 96,332 | 105,134 | 109,587 |
| Intelligence & Communications | 13,391 | 12,026 | 11,679 | 15,154 | 17,740 | 20,842 |
| Airlift & Sealift | 2,826 | 2,344 | 2,764 | 4,284 | 4,347 | 5,194 |
| Guard and Reserve Forces | 8,074 | 9,751 | 10,195 | 10,989 | 11,618 | 11,597 |
| Research & Development | 13,410 | 15,087 | 14,983 | 18,528 | 19,547 | 23,481 |
| Central Supply & Maintenance | 21,947 | 17,676 | 19,008 | 20,038 | 21,964 | 24,122 |
| Training, Medical, Other General Personnel Activities | 37,331 | 38,075 | 38,040 | 42,280 | 43,358 | 45,605 |
| Administration & Associated Activities | 4,252 | 4,038 | 3,217 | 3,907 | 3,150 | 4,833 |
| Support of Other Nations | 6,314 | 463 | 829 | 1,001 | 795 | 685 |
| Total - Direct Program (TOA) | 188,127 | 173,818 | 183,534 | 229,248 | 249,257 | 274,078 |

(NOTE: Totals may not add due to rounding.)

TABLE 3

Department of Defense - TOA by Component

(Dollars in Millions)

| | FY 1972 | FY 1976 | FY 1980 | FY 1982 | FY 1983 | FY 1984 |
|---|---|---|---|---|---|---|
| Current Dollars | | | | | | |
| Department of the Army | 22,094 | 23,759 | 34,571 | 52,173 | 57,771 | 65,364 |
| Department of the Navy | 24,041 | 31,360 | 47,085 | 68,792 | 81,936 | 86,875 |
| Department of the Air Force | 23,834 | 28,432 | 41,690 | 64,963 | 75,231 | 92,884 |
| Defense Agencies/OSD/JCS | 1,745 | 3,487 | 5,268 | 7,881 | 9,428 | 11,416 |
| Defense-wide | 4,788 | 8,657 | 13,605 | 17,629 | 16,088 | 17,539 |
| Total - Direct Program TOA | 76,502 | 95,695 | 142,219 | 211,438 | 240,455 | 274,078 |
| Constant FY 1984 Dollars | | | | | | |
| Department of the Army | 52,553 | 41,909 | 44,858 | 56,281 | 59,581 | 65,364 |
| Department of the Navy | 59,052 | 57,727 | 60,664 | 74,837 | 85,257 | 86,875 |
| Department of the Air Force | 60,320 | 52,884 | 54,045 | 70,539 | 78,282 | 92,884 |
| Defense Agencies/OSD/JCS | 4,016 | 6,048 | 6,614 | 8,585 | 9,783 | 11,416 |
| Defense-wide | 12,187 | 15,251 | 17,353 | 19,006 | 16,354 | 17,539 |
| Total - Direct Program TOA | 188,127 | 173,818 | 183,534 | 229,248 | 249,257 | 274,078 |

(NOTE: Totals may not add due to rounding.)

# APPENDIX C

TABLE 1

Department of Defense

General and Flag Officer Strengths

| Actual | General and Flag Officer Strengths | General and Flag Officers Per 10,000 Total Military |
|---|---|---|
| 1961 | 1,254 | 5.0 |
| 1962 | 1,303 | 4.6 |
| 1963 | 1,292 | 4.8 |
| 1964 | 1,294 | 4.8 |
| 1965 | 1,287 | 4.8 |
| 1966 | 1,320 | 4.3 |
| 1967 | 1,334 | 4.0 |
| 1968 | 1,352 | 3.8 |
| 1969 | 1,336 | 3.9 |
| 1970 | 1,339 | 4.4 |
| 1971 | 1,330 | 4.9 |
| 1972 | 1,324 | 5.7 |
| 1973 | 1,291 | 5.7 |
| 1974 | 1,249 | 5.8 |
| 1975 | 1,199 | 5.6 |
| 1976 | 1,184 | 5.7 |
| 19TQ | 1,174 | 5.7 |
| 1977 | 1,159 | 5.6 |
| 1978 | 1,119 | 5.4 |
| 1979 | 1,119 | 5.5 |
| 1980 | 1,118 | 5.4 |
| 1981 | 1,073 | 5.2 |
| 1982 | 1,073 | 5.1 |
| Programmed | | |
| 1983 | 1,073 | 5.0 |
| 1984 | 1,073 | 4.9 |

## TABLE 2

## Department of Defense

## Officer Strength

| Actual | Officer Strengths (000s) [1] | Enlisted to Officer Ratio |
|---|---|---|
| 1961 | 315 | 6.9 |
| 1962 | 343 | 7.2 |
| 1963 | 334 | 7.1 |
| 1964 | 337 | 7.0 |
| 1965 | 339 | 6.8 |
| 1966 | 349 | 7.9 |
| 1967 | 384 | 7.8 |
| 1968 | 416 | 7.5 |
| 1969 | 419 | 7.3 |
| 1970 | 402 | 6.3 |
| 1971 | 371 | 6.3 |
| 1972 | 336 | 5.9 |
| 1973 | 321 | 6.0 |
| 1974 | 302 | 6.2 |
| 1975 | 292 | 6.3 |
| 1976 | 281 | 6.4 |
| 19TQ | 279 | 6.5 |
| 1977 | 275 | 6.5 |
| 1978 | 273 | 6.5 |
| 1979 | 273 | 6.4 |
| 1980 | 277 | 6.3 |
| 1981 | 282 | 6.3 |
| 1982 | 291 | 6.2 |
| Programmed | | |
| 1983 | 298 | 6.1 |
| 1984 | 306 | 6.1 |

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1/ Includes all officers on extended active duty.

## TABLE 3

## Department of Defense

## Manpower Levels

(End Year - In Thousands)

| Actual | Active Military 1/ | Civilians 2/ | Total |
|---|---|---|---|
| 1961 | 2,494 | 1,215* | 3,709* |
| 1962 | 2,808 | 1,244 | 4.052 |
| 1963 | 2,700 | 1,226 | 3,926 |
| 1964 | 2,687 | 1,176 | 3,863 |
| 1965 | 2,655 | 1,155 | 3,810 |
| 1966 | 3,094 | 1,261 | 4,355 |
| 1967 | 3,377 | 1,398 | 4,775 |
| 1968 | 3,547 | 1,393 | 4,940 |
| 1969 | 3,460 | 1,391 | 4,851 |
| 1970 | 3,066 | 1,265 | 4,331 |
| 1971 | 2,714 | 1,190 | 3,904 |
| 1972 | 2,322 | 1,159 | 3,481 |
| 1973 | 2,252 | 1,100 | 3,352 |
| 1974 | 2,161 | 1,109 | 3,270 |
| 1975 | 2,127 | 1,078 | 3,205 |
| 1976 | 2,081 | 1,047 | 3,128 |
| 19TQ | 2,083 | 1,042 | 3,125 |
| 1977 | 2,074 | 1,022 | 3,096 |
| 1978 | 2,061 | 1,016 | 3,077 |
| 1979 | 2,024 | 991 | 3,015 |
| 1980 | 2,050 | 990 | 3,040 |
| 1981 | 2,082 | 1,019 | 3,101 |
| 1982 | 2,109 | | |
| Programmed | | | |
| 1983 | 2,127 | 1,056* | 3,183* |
| 1984 | 2,165 | 1,072 | 3,237 |

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1/ Excludes military personnel on active duty who are paid from Civil Works and Reserve Components appropriations.

2/ Direct and indirect hire. Excludes Civil Functions, special youth employment programs, and NSA employees.

*Estimated

### TABLE 4

### Active Duty Military Personnel, Reserve Component Military Personnel, and Civilian Personnel Strength 1/

(End Years - In Thousands)

| | 1968 | 1972 | 1976 | 1980 | 1981 | 1982 | 1983 | 1984 |
|---|---|---|---|---|---|---|---|---|
| Active Duty Military | | | | | | | | |
| Army | 1,570 | 811 | 779 | 777 | 781 | 780 | 780 | 783 |
| Navy | 765 | 588 | 525 | 527 | 540 | 553 | 560 | 572 |
| Marine Corps | 307 | 198 | 192 | 188 | 191 | 192 | 195 | 197 |
| Air Force | 905 | 726 | 585 | 558 | 570 | 583 | 592 | 613 |
| Total | 3,547 | 2,322 | 2,081 | 2,050 | 2,082 | 2,108 | 2,127 | 2,165 |
| Reserve Components (Selected Reserve) | | | | | | | | |
| Army National Guard | 389 | 388 | 362 | 367 | 389 | 408 | 417 | 421 |
| Army Reserve | 244 | 235 | 195 | 207 | 225 | 256 | 269 | 273 |
| Naval Reserve | 124 | 124 | 97 | 87 | 88 | 94 | 106 | 119 |
| Marine Corps Reserve | 47 | 41 | 30 | 35 | 37 | 40 | 40 | 42 |
| Air National Guard | 75 | 89 | 91 | 96 | 98 | 101 | 102 | 104 |
| Air Force Reserve | 43 | 47 | 48 | 59 | 62 | 64 | 67 | 70 |
| Total | 922 | 925 | 823 | 851 | 899 | 964 | 1,002 | 1,030 |
| Direct Hire Civilian | | | | | | | | |
| Army 2/ | 462 | 367 | 329 | 312 | 318 | 322 | 332* | 340 |
| Navy | 419 | 342 | 311 | 298 | 310 | 308 | 320* | 323 |
| Air Force 2/ | 331 | 280 | 248 | 231 | 233 | 233 | 233* | 236 |
| Defense Agencies | 75 | 61 | 72 | 75 | 79 | 84 | 85* | 86 |
| Total 2/ | 1,287 | 1,050 | 960 | 916 | 940 | 947 | 969* | 986 |

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1/ Numbers may not add to totals due to rounding.

2/ These totals include Army and Air National Guard technicians, who were converted from State to Federal employees in FY 1979. The FY 1968 total has been adjusted to include approximately 3,900 technicians.

*Estimated

## TABLE 5

## U.S. Military Personnel in Foreign Areas 1/

(End-Year - In Thousands)

| | 1968 | 1972 | 1976 | 1978 | 1979 | 1980 | 1981 | 1982 |
|---|---|---|---|---|---|---|---|---|
| Germany | 225 | 210 | 213 | 234 | 239 | 244 | 248 | 256 |
| Other Europe | 66 | 62 | 61 | 61 | 61 | 65 | 64 | 67 |
| Europe, Afloat | 23 | 26 | 41 | 35 | 25 | 22 | 25 | 33 |
| South Korea | 67 | 41 | 39 | 42 | 39 | 39 | 38 | 39 |
| Japan and Ryukyus | 79 | 64 | 45 | 46 | 46 | 46 | 46 | 51 |
| Other Pacific | 37 | 25 | 27 | 16 | 15 | 15 | 15 | 15 |
| Pacific Afloat (including Southeast Asia) | 94 | 51 | 24 | 26 | 22 | 15 | 25 | 33 |
| Thailand | 48 | 47 | 1 | -- | -- | -- | -- | -- |
| South Vietnam | 534 | 47 | -- | -- | -- | -- | -- | -- |
| Miscellaneous Foreign | 27 | 22 | 8 | 12 | 11 | 42 | 39 | 34 |
| Total | 1,200 | 595 | 460 | 472 | 458 | 489 | 502 | 528 |

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1/ Numbers may not add to totals due to rounding.

# APPENDIX D

## DEPARTMENT OF DEFENSE

## STRATEGIC FORCES HIGHLIGHTS

| | FY 1972 | FY 1976 | FY 1982 | FY 1983 | FY 1984 |
|---|---|---|---|---|---|
| STRATEGIC OFFENSIVE | | | | | |
| Land-Based ICBMS: | | | | | |
| TITAN | 54 | 54 | 52 | 43 | 34 |
| MINUTEMAN | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| Strategic Bombers (Primary Aircraft Authorized): | | | | | |
| B-52C/F/D | 142 | 145 | 75 | 0 | 0 |
| B-52G/H | 255 | 241 | 241 | 241 | 241 |
| FB-111 | 66 | 66 | 56 | 56 | 56 |
| Fleet Ballistic Launchers: | | | | | |
| POLARIS | 464 | 240 | -- | -- | -- |
| POSEIDON (C-3 and C-4) | 192 | 416 | 496 | 496 | 496 |
| TRIDENT | -- | -- | 48 | 72 | 120 |
| STRATEGIC DEFENSIVE | | | | | |
| Fighter Interceptor Squadrons: | | | | | |
| Active: | | | | | |
| F-106 | 8 | 5 | 4 | 4 | 3 |
| F-15 | -- | -- | 1 | 1 | 2 |
| Air National Guard: | | | | | |
| F-4 | -- | 2 | 5 | 5 | 7 |
| F-101 | 6 | 5 | -- | -- | -- |
| F-102 | 9 | 2 | -- | -- | -- |
| F-106 | 2 | 6 | 5 | 5 | 3 |
| Air Defense Batteries: | | | | | |
| NIKE-HERCULES | 40 | -- | -- | -- | -- |

## DEPARTMENT OF DEFENSE

## GENERAL PURPOSE FORCES HIGHLIGHTS

| | FY 1972 | FY 1976 | FY 1982 | FY 1983 | FY 1984 |
|---|---|---|---|---|---|
| **LAND FORCES** | | | | | |
| Army Divisions: | | | | | |
| Active | 13 | 16 | 16 | 16 | 16 |
| Reserve | 8 | 8 | 8 | 8 | 9 |
| Marine Corps Divisions: | | | | | |
| Active | 3 | 3 | 3 | 3 | 3 |
| Reserve | 1 | 1 | 1 | 1 | 1 |
| **TACTICAL AIR FORCES** | | | | | |
| Air Force Attack/Fighter Squadrons: | | | | | |
| Active | 66 | 74 | 80 | 80 | 81 |
| Reserve | 32 | 37 | 41 | 43 | 43 |
| Marine Corps Attack/Fighter Squadrons: | | | | | |
| Active | 25 | 25 | 28 | 27 | 28 |
| Reserve | 8 | 8 | 8 | 7 | 8 |
| Navy Attack/Fighter Squadrons: | | | | | |
| Active | 68 | 65 | 60 | 60 | 63 |
| Reserve | 12 | 10 | 10 | 10 | 10 |
| **NAVAL FORCES** | | | | | |
| Active Fleet | 596 | 422 | 439 | 434 | 443 |
| Naval Fleet Auxiliary Force | 2 | 15 | 27 | 26 | 34 |
| Naval Reserve Force | 53 | 60 | 43 | 35 | 36 |
| Other Ships (Active & NRF) | 10 | 7 | 6 | 5 | 5 |
| Strategic Forces Ships | 52 | 51 | 40 | 41 | 42 |
| Mobility Enhancement Ships | -- | -- | 18 | 18 | 21 |

## DEPARTMENT OF DEFENSE

## AIRLIFT AND SEALIFT FORCE HIGHLIGHTS

| | FY 1972 | FY 1976 | FY 1982 | FY 1983 | FY 1984 |
|---|---|---|---|---|---|
| STRATEGIC AIRLIFT 1/ | | | | | |
| C-5A | 62 | 70 | 70 | 70 | 70 |
| C-141 | 234 | 234 | 234 | 234 | 234 |
| KC-10A | -- | -- | 11 | 18 | 24 |
| TACTICAL AIRLIFT 1/ | | | | | |
| Air Force Active: | | | | | |
| C-130 | 288 | 234 | 218 | 218 | 218 |
| C-7A | 4 | -- | -- | -- | -- |
| Air Force Reserve and National Guard: | | | | | |
| C-130 | 188 | 262 | 288 | 294 | 302 |
| C-123 | 32 | 64 | 16 | 3 | 3 |
| C-7A | 32 | 51 | 32 | 16 | -- |
| Other | 54 | -- | -- | -- | -- |
| Active Navy and Marine Corps Tactical Support | 134 | 90 | 38 | 47 | 47 |
| Navy and Marine Corps Reserve Tactical Support | 48 | 33 | 34 | 35 | 33 |
| SEALIFT | | | | | |
| Ships, Active: | | | | | |
| Tankers | 17 | 12 | 21 | 21 | 22 |
| Cargo and Stores Ships | 24 | 19 | 14 | 14 | 14 |
| Controlled Fleet Charters: | | | | | |
| Tankers | 21 | 14 | 10 | 10 | 10 |
| Cargo | 1 | 21 | 23 | 23 | 26 |
| National Defense Reserve Fleet | 100 | 139 | 181 | 183 | 189 |

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1/ Primary Aircraft Authorized.

# UNITED STATES MILITARY POSTURE FOR FY 1984

Prepared by

THE ORGANIZATION OF THE JOINT CHIEFS OF STAFF

# UNITED STATES
# MILITARY POSTURE
# FOR
# FY 1983

Prepared By

## THE ORGANIZATION OF THE JOINT CHIEFS OF STAFF

## PREFACE

The primary purpose of this statement on the military posture of the United States is to supplement testimony by the Chairman of the Joint Chiefs of Staff and members of the Organization of the Joint Chiefs of Staff at Congressional hearings in support of the Fiscal Year 1984 Defense Budget.

Section 1 analyzes global trends from which strategic implications for the future military posture of the United States are derived. It examines the changing structure of the American economy, the growing interdependence between the United States and other nations, and global political-military relationships. This section also contains an overview of potential sources of international conflict.

Section 2 reviews the Soviet Union's activities to expand its influence in world affairs. The current world military situation is then portrayed by discussing the capabilities of the US, the USSR, and the allies of each.

Section 3 outlines US military programs planned to meet the challenges of the future.

The Appendix discusses supplemental topics of current interest.

# SECTION 1: THE WORLD WE FACE

## INTRODUCTION

Although the United States possesses great military and economic power, our national security is not assured. Global instability threatens American interests abroad and could thereby endanger the well-being of our society at home. Of direct and urgent concern is the Soviet Union's unrelenting arms buildup. We must meet these military challenges however demanding the task. The US Armed Forces are steadily improving, and are stronger now than at any time in the recent past. But threats from abroad have grown apace, and risks remain. The following overview will outline the current world situation and the US military strategy and forces to meet our global security responsibilities, and will summarize necessary force improvements to support the strategy. A more detailed discussion of the global military balance and resultant US force improvement requirements is contained in Section 2. Ongoing and planned US force improvement programs are described in detail in Section 3.

## REALITIES AND TRENDS

### The Soviet Challenge

In US military planning, the USSR is the most important factor in today's world. Soviet influence is based primarily on military power. The dominant feature of the Soviet economy is the military sector, which now accounts for some 15 percent of its Gross National Product (GNP). The Soviet Union's long-term, massive commitment to a military buildup, linked to an ideological intent to frustrate the success of capitalism in the world, constitutes a serious challenge to the United States and its allies and friends. Through major investments in research and production — at relatively low labor costs — the Soviet Union has fielded the largest modern military force on earth. Confidence in this wide array of forces has engendered greater assertiveness and worldwide adventurism by Soviet leaders.

In 1982, the change in leadership of the Soviet Union raised hopes that a less aggressive foreign policy might be forthcoming. Many problems face the new Soviet hierarchy, and certain options for their resolution would be welcome. A pull-out from Afghanistan, for example, would raise Soviet prestige in almost all countries of the world. A lowering of military expenditures from 15 percent of the GNP could help stimulate a sluggish economy and raise living standards for the Soviet people. Despite the attractiveness of these options, however, there is, as yet, no indication that the leadership plans any such major shifts in policy. Given the fundamental power base of the Communist Party and its internal commitments, the underlying stability of the Soviet economy, and bureaucratic inertia, reduced investment in the military sector is unlikely.

The Soviet Union presents the West with formidable conventional and nuclear warfare threats. Naturally, the fear of a nuclear confrontation instills the greatest concern. However, the imbalance in the relative survivability and composite force effectiveness between US and Soviet nuclear weapons presents a grave danger to the United States and to all people. Fear of nuclear war has given birth to a popular movement in the West to freeze the number of nuclear weapons at present levels. The USSR is exploiting these legitimate concerns about the nature of nuclear war because there are significant advantages to the Soviets in freezing the current elements of imbalance. They have modernized much of their nuclear force, giving them a position of advantage, while the United States is just beginning a modernization program. It should be recognized that the current imbalance, and not the US modernization program, represents the real danger to the world and reduces the Soviet incentive to negotiate mutual weapons reductions.

### Global Interdependence

Today, US military strategy must take a broad view. The US faces a complex array of political-economic links to the world. The United States is not only inextricably involved in foreign markets for raw materials, but now imports substantial amounts of manufactured goods and technology. Similarly, other nations depend upon the United States as a market for their products and as a source of technology, goods, and services to support their economies. While the US economy still greatly influences the world economic system, many other nations and coalitions of nations are assuming important roles. This growing political-economic interdependence has created for the West a global challenge and for the USSR additional opportunity for exploitation.

Political-economic interdependence has also made the industrialized nations more susceptible to the adverse affects of regional political instability. Regional conflicts and incidents of international subversion and terrorism are frequent and widespread. In addition to political destabilization, unrest in various areas of the world can affect the interaction of the United States and its allies with regard to important markets, products, and resources. Moreover, these circumstances have created new opportunities for the USSR. With an improved power-projection capability, a politically and militarily activist foreign policy, and extensive use of surrogate forces, the Soviet Union and its allies have demonstrated a growing capacity to exploit or intervene in regional crises. Soviet-supported Cuban involvement in Sub-Saharan Africa, the Middle East, and the Caribbean Basin, Vietnam's military activities in Southeast Asia, and the presence of Soviet military personnel in Cuba underline the seriousness of this challenge.

Political-economic interdependence is a modern global reality. In this context, the continued prosperity of the West and the defense of its ideals are best pursued through cooperative political, economic, and security relations with friendly states, to include good relations with the less-developed countries. In an interdependent world system, any US reversion toward isolationism could have serious implications for the internal prosperity and stability and the mutually supporting relationships of the United States and its allies. Moreover, such a change in international relations would present the Soviet Union with an unprecedented opportunity to expand its influence to the detriment of our interests and responsibilities.

### The Cost of Defense

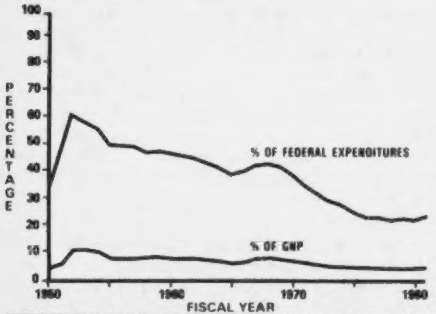
In addition to dictating a global perspective for framing US defense strategy, the political-economic realities of the global situation have created other security concerns. Among these are questions about the sources and availability of basic military equipment production, the advanced technology essential to acquiring state-of-the-art defense equipment, and the industrial base necessary to build and sustain the quantities of weapons required for our defense. There is also the related budget issue of how much the United States can afford to spend for defense, as compared to how much is required.

For many years, US technology led the world, but American preeminence in some areas is rapidly declining or has vanished. Japan is close to parity with the United States in microelectronics technology, and is the world's leader in some aspects of this technology, which possesses great potential for military applications. Further, Japan is nearly equal in computer development. The European community will account this year for over a quarter of the world's commercial satellite launchings, and the United States can expect an increasing challenge in space from both Europe and Japan. For instance, the European Ariane launch vehicle will be in direct competition with the US space shuttle for many commercial satellite payloads through the 1990s. The point to be emphasized is that these and other shifts in technological leadership could render the United States dependent on other countries for some important components of basic and state-of-the-art defense equipment. In addition, the spread of technology to other nations has made it easier for the Soviet Union to acquire Western technology for its own use, further reducing the qualitative advantage in weaponry once enjoyed by the West.

A second security concern is the West's comparative disadvantage in weapons production. Faced with relatively high manpower costs and important, competing, domestic priorities, the West has sought to counter the larger armed forces of the Soviet Union and its allies with comparatively smaller forces equipped with high quality and technically advanced equipment. In the context of recent double-digit inflation, and as the weapon systems of the West became more complex and sophisticated to meet the expanding threat, unit costs have escalated. Yet, the Soviet Union's relatively low manpower costs and state-controlled economy have allowed them to devote considerably more of their national budget to military research and development, weapons procurement, and facilities construction than the West. Consequently, the Warsaw Pact has been able to maintain its quantitative lead in armed forces while simultaneously reducing or eliminating in many areas the West's advantage in technology. Increased emphasis upon military coproduction programs and selective weapon systems production specialization by the United States and its allies is required in order to contribute to reversing this trend.

The large Soviet investment in quantity and quality of military forces poses hard questions for the United States — what is needed for defense and how much can the nation afford? Discounting the upward surge during the Vietnam conflict, the United States has experienced a steady decline in the defense budget in the past several decades, both as a percentage of the nation's GNP and as a fraction of the federal budget (see Chart 1-1). Even during the peak of the conflict in Vietnam, the percentage of the GNP devoted to defense approximated that spent a few years earlier when the nation was not involved in armed conflict. The federal budget has shifted from one emphasizing defense to one dominated by funding for domestic programs. But

**U.S. DEFENSE EXPENDITURES**
**PERCENTAGE OF GNP AND FEDERAL EXPENDITURES**



AS OF 1 OCTOBER 1982 *CHART 1-1*

with a defense budget now designed to correct the inadequate funding of the recent past, critics are again asking how the nation can "afford" peacetime increases in defense spending. In answering this question, two points should be made. First, the security of our nation cannot be relegated to second priority in relation to other national needs. We are faced today with the demanding and unavoidable challenge of improving the readiness of today's forces while simultaneously building the forces needed tomorrow. It is too easy, and a mistake, to focus on one requirement to the exclusion of the other. Second, the proposed defense budget represents modest growth, with the fraction of the nation's GNP targeted for defense still below past peacetime spending levels of the 1950s and 1960s, and well below increases in times of conflict. In the context of world events, the currently estimated 6.8 percent of the GNP which the proposed defense budget represents does not constitute a disproportionate share of the resources available for defense and domestic programs.

## THE MILITARY STRATEGY TO MEET THE CHALLENGE

The foregoing appraisal of world realities and trends indicates that, despite many favorable prospects, the uncertain world of the future offers serious challenges to the security and prosperity of the United States. To insure that our nation can deal with these challenges requires a comprehensive national strategy, integrating diplomatic, political, economic, and military factors. The military element of that strategy, including its objectives and fundamental ingredients, is outlined next.

### Objectives

The basic objective of the national military strategy is to deter war, while maintaining an atmosphere of security within which the United States and its allies and friends can pursue their legitimate interests and foster the rights and well-being of their citizens. The United States strives to deter war by making it self-evident to the Soviet Union that its war aims cannot be achieved if it attacks the United States or its allies, because the cost would be too great. This deterrent strategy is rooted in a deep-seated national commitment to peace.

As the major threat to the United States, the Soviet Union has large forces capable of attacking on short notice. While US forces need not match Soviet forces in each measure, US strategy and force capabilities must be convincing to Soviet war planners if deterrence is to work. Weak forces will not convince. Thus, to insure peace, it is necessary to be prepared for war.

Although US military strategy has deterred direct Soviet attack for many years, it has not prevented indirect incursions within the less-developed world. Another important purpose of US armed forces is to counter Soviet expansionist activities, particularly those aimed at limiting US and allied freedom of access throughout the world. Moreover, US forces can also contribute a stabilizing influence during regional crises, thereby reducing the attraction for Soviet direct intervention or indirect involvement.

### Ingredients of the Strategy

Because its purposes are constant, the ingredients of United States strategy are relatively constant. Changes in detailed application of the strategy evolve as trends in the world require. For example, instability in Southwest Asia and the Middle East has required greater attention in recent years. The fundamental ingredients of the strategy are nuclear deterrence, strong alliances, forward deployed forces, the central reserve, freedom of the seas, force mobility, command and control, and intelligence.

#### Nuclear Deterrence

The role of US strategic nuclear forces is to remove all incentive for direct attack against the United States by insuring any attacker an unacceptable outcome. By gaining advantages in certain measures of nuclear strength, the USSR is challenging the US guarantee of effective retaliation and thereby threatening world stability. Modernization of US strategic nuclear forces to counter the growing nuclear warfighting potential of the

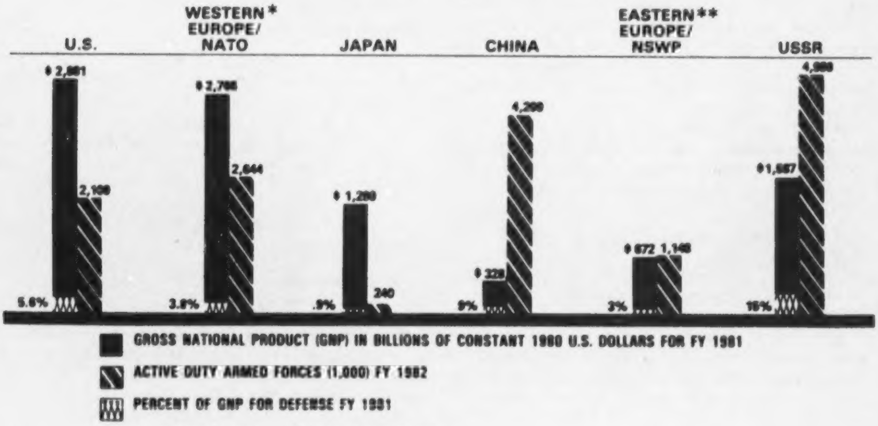
USSR is the highest priority in upgrading the US security posture. In parallel, sensible arms control agreements can help reduce the danger of nuclear war and contribute to the security of the US and its allies. The Joint Chiefs of Staff support the President's proposals for substantial reductions in nuclear weapons. But there should be no misunderstanding, concomitant modernization of the United States strategic nuclear forces is essential for deterrence and security. Nuclear arms control agreements can help provide boundaries for the problems of nuclear armaments and can help assuage the world's fears of nuclear war. It is unlikely, however, that such agreements can greatly change the overall Soviet threat to the US and its allies; and unless the Soviets reduce overall military spending and armaments, agreements will have little affect on the size of defense budgets required.

Alliances: NATO and East Asia

The second fundamental ingredient of US strategy is a strong system of alliances. The sharing of democratic values and the combined economic strength of the advanced industrial countries offer a firm base for effective collective security among the NATO nations and US allies in East Asia (see Chart 1-2). Further, the integrity of US collective security arrangements requires recognition that the interests of the United States and those of its allies are not always completely congruent, particularly in geographic areas outside the alliances. Most of the allies of the US have no counter to the nuclear power of the USSR. Therefore, the alliance element of US strategy, critical to dealing with all manner of conventional warfare threats to both the US and friendly nations, functions against the backdrop of American nuclear deterrence. Just as nuclear deterrence is the ultimate guarantor of peace and survival for the US, so it is also for US allies.

The Soviets, by achieving, and in some cases, exceeding nuclear parity, have guaranteed that war cannot be deterred with strategic nuclear weapons alone. The Soviets and their allies have fielded huge, combined arms armies composed of large numbers of ground forces, air forces, and nonstrategic nuclear weapons — forces which the US, acting alone, does not match in numbers. Allied contributions in weaponry, well-trained manpower, facilities, and control of key geographical areas all reduce the size of the forces needed by the United States and make a significant contribution to deterrence.

## FOUNDATION OF U.S. COALITION STRATEGY
### ECONOMIC AND MILITARY STRENGTH OF MAJOR POWERS



* EXCLUDES FRANCE, CANADA, AND SPAIN
** EXCLUDES ALBANIA AND YUGOSLAVIA

*CHART 1-2*

A key factor in the success of US alliances is the forward deployment of American forces. US forces in NATO and in East Asia support the allies in deterring attack by the Soviet Union or North Korea. To the Soviets, they indicate any major attack will be met by opposition that includes the United States. To the allies, these forces demonstrate US commitment to the common defense. In the event of attack, forward deployment insures that the entire allied force, including the American contribution, can immediately move to a war footing. The situation created thereby also provides a secure base for receiving US reinforcements. In peacetime, the American presence among the allies helps stiffen allied resistance to the continuous political pressures linked to the visible military threat from the Soviets. It is important that the Soviets see these alliances as strong, both militarily and politically.

### Southwest Asia Stabilization

Events in Southwest Asia over the past decade have affected the implementation of US strategy. Stability and a favorable strategic consensus in this resource-rich region are important to the advanced industrial nations. The activities of the Soviet Union in the region continue to run directly counter to those of the United States. Soviet efforts to subjugate Afghanistan, as well as support for Syria and Iraq, indicate the seriousness of their intentions. On the other hand, the US Middle East Peace Initiative should improve internal stability in the Middle East and Southwest Asia, and allow wider support for US policies. Aid to Lebanon and continued efforts to assist in resolving the Palestinian problem are necessary near-term actions. For the longer-term, a US unified command — Central Command — has been established and charged with US security interests and assistance to regional friends in Southwest Asia.

### A Global Perspective

The USSR is pursuing the development of a global, client-state system, which must be viewed in the context of US international security concerns and responsibilities. Regional instabilities and Soviet-inspired threats to peace exist in many diverse areas, including the Western Hemisphere. Conflict involving the Soviet Union could occur anywhere on the globe. US military strategy must concern itself with contingencies in all regions of the world. In most regions, the primary defensive efforts must be mounted by the friends and allies most affected, with the United States providing critical economic, political, and military assistance. These friends and allies must know, however, that US military forces can help them in emergencies, particularly if they are directly threatened by Soviet forces.

With regard to these global responsibilities, US forces are obviously not available to defend everywhere against every threat at all times. US military strategy does not envision that approach. At the same time, the United States must make it clear that its interests will be defended and its obligations to all allies will be met. War must be deterred, but if conflict occurs, the US will seek to limit the scope of that conflict and the involvement of the USSR. US force employment planning considers the fundamental tasks which must be carried out, as well as the flexibility to meet circumstances which may arise under an almost infinite range of contingencies which can threaten US security interests. Because current forces are insufficient to take on all tasks simultaneously, general strategic priorities and the specific circumstances and forces available at the time will govern force employment. These general strategic priorities govern both the use of forces at any particular time and the improvements and enhancements of forces for the future. The strategy is designed to capitalize on the enduring strengths of the United States: its political and social values, diversified economy, advanced technology, and the ingenuity of its people. To succeed, the strategy also requires adaptability to a changing world and the help of supportive allies.

### The Forces Required

Many of the forces needed to carry out the strategy already exist or are programmed. These forces, as well as recommended programs for increased sustainability, combat readiness, and force modernization, are the prerequisites to meet total force requirements determined by US global responsibilities and strategy.

As noted, major units of all US Military Services are forward deployed with various allies in the NATO area and in East Asia. These forces have long contributed potent conventional and nonstrategic nuclear forces to the alliances. Maintaining these necessary alliance deterrents requires a continued effort by the US and its allies to counter the continuous buildup and improvement in Soviet forces — most ominously in the field of intermediate-range nuclear missiles.

The majority of US military power is based within the United States, including most of the strategic nuclear forces and the central reserve of conventional forces — both active forces and reserve components. Upon these forces rest the responsibilities of deterring general nuclear war, reinforcing forward deployed forces, and helping to deter or contain conflicts throughout the areas of the world where there is no permanent US military presence. An essential element of US strategy is the ability to deploy combat ready, well-equipped ground, sea, and air forces of the central reserve to wherever needed. Continued investment in airlift and sealift forces to permit such deployment is fundamental to US military strategy.

Freedom of the seas is a key element of US global strategy. Recently, the Soviet Navy has demonstrated a growing capability to challenge US seapower. A strong navy is needed to support and reinforce forward deployed forces in combat, to move and support rapidly deployable forces from the United States, to provide a mobile US military presence worldwide, and to insure uninterrupted commerce for the nation. The continued strengthening of the US Navy to assure that the United States and its allies can maintain maritime superiority in key ocean areas is essential to the strategy.

Force Structure. The goal is to have sufficient active and reserve force components to carry out the US national military strategy with a reasonable assurance of success. Current US force levels, even when combined with those of its allies, are insufficient. Accordingly, selective and balanced expansion of present force levels is required as proposed in the budget. Dependence on the reserve components as a cost effective method to provide necessary total force levels will continue. The need for modern equipment and increased readiness for reserve component units requires additional support from the Military Services and the Congress.

Force Modernization. Countering quantitatively superior enemy forces with qualitatively superior forces remains a basic objective of US strategy. The continued aging of US weapon systems has led to increased operations and maintenance costs. As the Soviets continue to modernize, US weapon systems become less capable of meeting the threat. US forces must be modernized if they are to continue to counter the threat and play their role in US strategy. Ongoing modernization efforts address shortcomings in strategic forces, nonstrategic nuclear forces, and conventional forces. Of highest priority is modernization of the strategic nuclear force.

Readiness and Sustainability. Efforts to modernize and expand US forces must be balanced with programs to support them. The United States must maintain current forces at high readiness and must be able to sustain them in battle. Each of the Service Chiefs agrees that great progress has been made in improving the readiness of our forces, and progress is being made in sustainability. Perhaps the most important factor in the readiness improvement has been the enlistment and retention of good people. An old lesson that the cornerstone for a good military unit is its people has been relearned. The young men and women entering and remaining in the Services are capable of being trained to effectively maintain and fight with the sophisticated and highly technical weapon systems of the 1980s. It is important that they be trained well. The Administration, Congress, and the American people should congratulate themselves for having the wisdom to move to correct the deficiencies in compensation and support for adequate living and working conditions for service men and women. The neglect in these areas during the 1970s was costly. The current positive trend in this important aspect of service life should be continued for the long term.

Mobility. To produce the flexibility to react to threats to US national interests worldwide, adequate strategic sealift and airlift, intertheater as well as intratheater, is vital. Key elements of global mobility also include communications, intelligence, data processing, management, training, maintenance support, cargo handling personnel, equipment and facilities, and protection for lines of communication. The United States must seek continued and expanded agreements which permit overflights and access to overseas airfields and ports. The US must also seek continued allied assistance with mobility operations and use of related support facilities. Where facilities are inadequate, the United States should encourage and assist in their improvement. To be able to respond promptly to global contingencies, pre-positioning of supplies and equipment in certain areas, and related host nation support arrangements, must be continued and expanded.

Command, Control, and Communications ($C^3$). Effective $C^3$ is integral to the successful employment of military forces. $C^3$ provides the essential link between the National Command Authorities (NCA), commanders of unified and specified commands, and forces in the field. $C^3$ systems whose effectiveness is assured during all phases of conflict add to deterrence and are vital if deterrence fails. Although current systems have deficiencies and vulnerabilities, recent programs have improved wartime survivability. Superior US technology and key joint and Service initiatives can provide needed improvements, but the technological race between $C^3$ systems and counter $C^3$ — electronic warfare — is intensive and requires continued attention.

Intelligence. US defense strategy depends heavily on accurate and timely intelligence for warning and for effective employment of US forces. Mission responsive intelligence, and rapid distribution of this information to users, permits modern weapon systems to support modern tactical concepts. Intelligence systems cannot be "short changed" if the operational commanders and their forces are to be effective.

Joint Doctrine. Another key to meeting the expanded military requirements of the future is more effective and comprehensive integration of the capabilities of all Services and of the allies. The innovative development of further joint doctrine for the employment of forces, tested and refined through joint and combined exercises, promises enhanced effectiveness and expanded total capability. The Joint Chiefs of Staff, together with the unified command Commanders in Chief, are devoting special attention to the field of joint doctrine to ensure that tactical concepts and technological developments reinforce each other and provide the best defense possible with resources available.

## SUMMARY

The changing world America faces presents multiple uncertainties. It is, however, certain that nations are becoming more interdependent in that world. Soviet military power with the capability to threaten global attacks on the US and its allies is growing. Soviet leaders, with confidence in their military power, are using it for more than defensive purposes. Soviet military forces provide the supporting background for indirect strategies aimed at splitting the US from its alliances and at denying free commerce between the industrial democracies and the developing world. These are the hard realities. However, the United States has no reason to fear the future.

The military strategy to meet the Soviet challenge and to protect US interests worldwide is sound. The forces to support the strategy are not inexpensive, but there is no effective strategy which is less costly than one based on deterrence, collective security, and flexible forces. United States forces have improved markedly in the past two years, but the Soviet Union has also continued their own force improvements. The United States is now at the point where the progressive buildup of its forces will begin to take effect. A steady, sustained commitment to develop and maintain these modern forces will be a key factor in determining the role the United States will play in future world events. The Department of Defense Budget for FY 1984 continues the effort to meet our global responsibilities.

# SECTION 2: TODAY'S CHALLENGES

## INTRODUCTION

This section assesses in more specific terms the worldwide military situation. Described are recent Soviet political-military initiatives throughout the world, the challenges facing the United States in terms of the global and regional military balances between the Soviet Union and the United States and its allies, and the situation in regions where Soviet surrogates are active but a direct Soviet and US confrontation of forces does not yet exist. Finally, a summary assessment of US forces is provided.

Map 2-1 shows the various formal international links established by the US and the USSR. Areas of contemporary military and political tension are also highlighted. US and Soviet interests focus to a large degree on the less-developed countries, many of which are resource rich. Specific contributions of these critical mineral suppliers are summarized in Chart 2-1. The resource supply patterns shown in the chart demonstrate why access to these regions is important to the US and its allies, and how the Soviet Union, by intrusion therein, gains political and economic leverage against the West. During 1982, the USSR used its military power in a number of significant ways. Soviet forces continued to fight in Afghanistan, and the threat of Soviet action influenced Poland to abandon political reforms. Deployment of additional Soviet theater nuclear weapons increased the nuclear threat to NATO. At the same time, the introduction of Soviet weapons into Nicaragua and Grenada exacerbated regional instability in the Caribbean Basin, disrupted hemispheric alignments, and increased the

**PRINCIPAL SUPPLIERS OF CRITICAL MINERALS***

| MINERAL | PRINCIPAL PRODUCING COUNTRIES AND % OF 1980 TOTAL WORLD PRODUCTION | COUNTRIES WITH MAJOR RESERVES AND ESTIMATED % OF WORLD TOTAL |
|---|---|---|
| BAUXITE | AUSTRALIA 30%, GUINEA 15%, JAMAICA 14%, SURINAME 5%, USSR 5%, BRAZIL 4% | GUINEA 28%, AUSTRALIA 20%, BRAZIL 11%, JAMAICA 9%, CAMEROON 4% |
| CHROMITE (CHROMIUM ORE) | SOUTH AFRICA 35%, USSR 25%, PHILIPPINES 6%, ZIMBABWE 6%, TURKEY 4% | SOUTH AFRICA 68%, ZIMBABWE 30%, FINLAND 0.7%, USSR 0.5% |
| COBALT | ZAIRE 50%, USSR 15%, ZAMBIA 11%, CANADA 5%, AUSTRALIA 5%, PHILIPPINES 4%, FINLAND 4% | ZAIRE 40%, ZAMBIA 15%, USSR 9%, CUBA 8%, PHILIPPINES 8%, NEW CALEDONIA 4%, AUSTRALIA 2%, MOROCCO 2% |
| COLUMBIUM | BRAZIL 80%, CANADA 12% | BRAZIL 79%, USSR 17%, CANADA 3% |
| MANGANESE | USSR 40%, SOUTH AFRICA 22%, BRAZIL 8%, GABON 8%, AUSTRALIA 7%, INDIA 8% | USSR 40%, SOUTH AFRICA 41%, AUSTRALIA 4%, GABON 3%, BRAZIL 2% |
| NICKEL | CANADA 25%, USSR 20%, NEW CALEDONIA 11%, AUSTRALIA 8%, PHILIPPINES 5%, INDONESIA 5%, CUBA 5%, SOUTH AFRICA 3% | NEW CALEDONIA 25%, CANADA 15%, USSR 14%, INDONESIA 13%, PHILIPPINES 10%, AUSTRALIA 8% |
| PLATINUM-GROUP METALS | USSR 48%, SOUTH AFRICA 45%, CANADA 5% | SOUTH AFRCIA 81%, USSR 17% |
| TANTALUM | BRAZIL 28%, CANADA 23%, THAILAND 19%, AUSTRALIA 14%, NIGERIA 8%, RWANDA 2%, ZAIRE 2% | ZAIRE 57%, NIGERIA 11%, THAILAND 7%, USSR 7%, MALAYSIA 5%, BRAZIL 9% |
| TIN | MALAYSIA 25%, USSR 15%, THAILAND 14%, INDONESIA 13%, BOLIVIA 11%, CHINA 8% | INDONESIA 16%, CHINA 15%, MALAYSIA 12%, THAILAND 12%, USSR 10%, BOLIVIA 8% |
| TITANIUM ORES** | | |
| ILMENITE | AUSTRALIA 27%, CANADA 18%, NORWAY 17%, USSR 9%, SOUTH AFRICA 7%, INDIA 4%, MALAYSIA 3%, FINLAND 3% | INDIA 23%, CANADA 22%, NORWAY 18%, SOUTH AFRICA 19%, AUSTRALIA 8%, U.S. 8% |
| RUTILE | AUSTRALIA 69%, SIERRA LEONE 12%, SOUTH AFRICA 11%, SRI LANKA 3%, USSR 2% | BRAZIL 74%, AUSTRALIA 7%, INDIA 6%, SOUTH AFRICA 4%, ITALY 2%, SIERRA LEONE 2%, USSR 2% |
| TUNGSTEN | CHINA 28%, USSR 18%, CANADA 7%, BOLIVIA 6%, AUSTRALIA 6%, U.S. 5%, SOUTH KOREA 5%, NORTH KOREA 4% | CHINA 52%, CANADA 2%, USSR 8%, U.S. 5%, NORTH KOREA 5%, SOUTH KOREA 3%, TURKEY 3% |

* MINERALS VITAL TO DEFENSE PRODUCTION WHICH HAVE LIMITED CONVENIENT SUBSTITUTION POSSIBILITIES IN THEIR MAJOR APPLICATIONS AND FOR WHICH THE U.S. IS HIGHLY DEPENDENT ON IMPORTS FOR ITS CONSUMPTION REQUIREMENTS.

** ILMENITE SUPPLIES ABOUT 87% OF THE WORLD'S DEMAND FOR TITANIFEROUS METALS

AS OF 1 JANUARY 1983

*CHART 2-1*

potential longer-term jeopardy to the flow of key resources through Caribbean sea lines of communication (SLOCs) to the United States and Europe.

## SOVIET GLOBAL INITIATIVES

The Soviet Union's growing confidence in its ability to project power globally through military and nonmilitary means has fostered Soviet references to a changed international "correlation of forces," and has been a key factor underlying the USSR's increased activities in Ethiopia, Afghanistan, Sub-Saharan Africa, Southwest Asia, Vietnam, and Cuba. Soviet global military activism has progressed from limited arms assistance in the 1950s, to the suppression of Hungary in 1956 and the use of armed forces in Czechoslovakia in 1968, to the use of Cuban and East German proxies in Africa beginning in the mid-1970s, and most recently to its invasion of Afghanistan in December 1979.

The Soviet buildup of nuclear and conventional military forces, including the development of a blue-water navy and the expansion of long-range airlift, reflects Soviet potential to project power worldwide. These important military developments significantly enhance the Soviet Union's foreign policy of coupling diplomatic and economic relations with coercion or subversion. Although Soviet foreign policy has been punctuated by some notable setbacks, such as in Egypt, the spread of Soviet influence has proved difficult for Western nations to counter.

### Arms Sales, Military Assistance, and Military Advisors

Weapons transfers remain the Soviet Union's most widely employed means of projecting political influence. Since 1954, Soviet arms sales agreements totaling about $80 billion have been concluded with the Third World, with over half of this total occurring after 1976. Soviet arms agreements are generally concentrated among a small number of countries, in many cases disrupting regional stability. Less-developed nations and insurgent groups enjoying Soviet support have been attracted by favorable financial terms, quick delivery and, in some cases, advanced weaponry not available from Western sources — including weaponry not yet acquired by Warsaw Pact allies. The costs of equivalent US and Soviet equipment supplied to the Third World are becoming comparable, and for the Soviet Union, weapons sales have become an increasing source of Western hard currency. However, Soviet weapons transfers serve primarily as an entree for Soviet advisors into the recipient's military establishment. This allows them to influence local leaders and policies through control over spare parts, training, and the sale of newer equipment.

In 1980, approximately 15,000 Soviet military personnel were stationed in 25 non-Warsaw Pact countries (excluding Afghanistan and Cuba), where they played a central role in organizing, training, and influencing client armed forces. Since 1955, over 58,000 military personnel from the less-developed countries have been trained in the Soviet Union and Eastern Europe. The importance attached to the role of these military advisors and the training provided is underscored by the fact that a main directorate of the Soviet General Staff controls these operations.

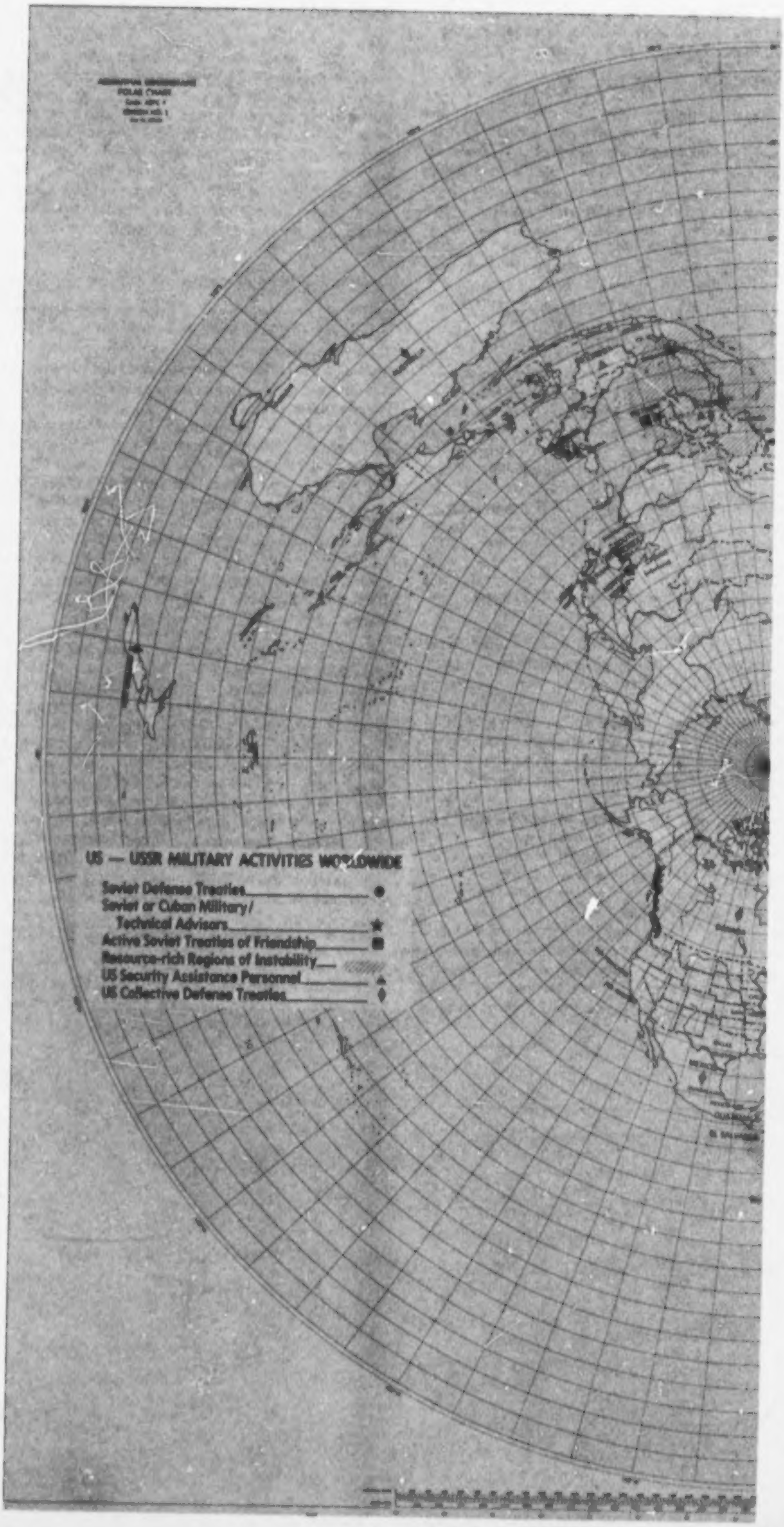
### Economic Aid and Treaties

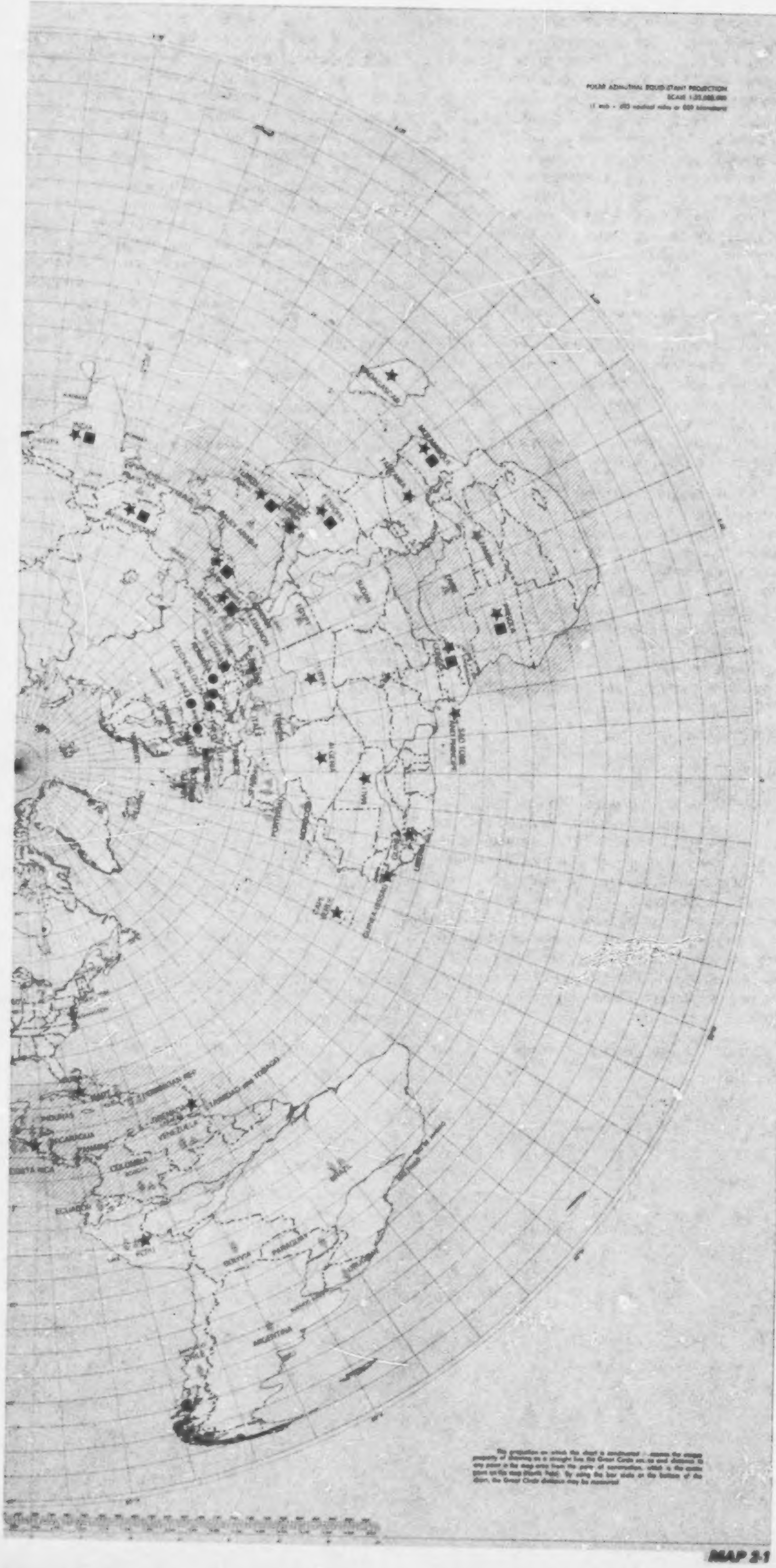
The selective application of economic assistance is frequently used in conjunction with arms transfers as an adjunct to Soviet foreign policy. Between 1954 and mid-1981, the Soviet Union extended approximately $20 billion in aid to noncommunist developing countries. All such assistance was the result of bilateral agreements and, in many cases, appeared to be motivated more by political or military considerations than by economics. Most Soviet aid is directed at a relatively small number of countries in the Middle East, North Africa, and South Asia, and is usually spent on state-owned showpiece projects that strengthen the public sector and accrue maximum propaganda advantages for the Soviet Union. If a client cannot repay in hard currency, the Soviets readily accept commodities, such as cotton, gas, minerals, or advantageous fishing or other commercial rights.

The Soviet Union has signed 12 treaties of friendship and cooperation since 1971. Ten of these treaties are still in force, and serve as visible symbols of the USSR's efforts to consolidate its ties with less-developed nations. It is no coincidence that the signatories to these agreements, as indicated on Map 2-1, have been recipients of substantial Soviet military and economic assistance. While the treaties have not always automatically translated into greater Soviet political influence or strategic advantage, they have served as a framework for subsequent agreements concerning military, political, economic, scientific, or cultural affairs. As a recent example, the Soviet Union used its treaty with Afghanistan as a "legal" pretext for military intervention.

### Proxies, Subversion, and Military Force Projection

The use of proxies is increasingly a key element of Soviet efforts to destabilize Third World countries and support anti-Western movements. The dispatch of proxy


POLAR CHART
US — USSR MILITARY ACTIVITIES WORLDWIDE
Soviet Defense Treaties ●
Soviet or Cuban Military/Technical Advisors ★
Active Soviet Treaties of Friendship ■
Resource-rich Regions of Instability ▨
US Security Assistance Personnel ▲
US Collective Defense Treaties ◆


POLAR AZIMUTHAL EQUIDISTANT PROJECTION
HONDURAS
NICARAGUA
COSTA RICA
VENEZUELA
COLOMBIA
TRINIDAD AND TOBAGO
ECUADOR
PERU
BRAZIL
BOLIVIA
PARAGUAY
ARGENTINA
CHILE

MAP 2-1

military forces and advisors minimizes Soviet risks, while giving the appearance of international support to leftist forces in a local conflict. As the prime example, approximately 45,000 Cuban military personnel are currently operating in over 15 countries. Cuban activities abroad include military, economic, and technical assistance, and intelligence and security operations. Cuban civilians are also used. They concentrate on providing services such as education and public health. Among the East Europeans, the East Germans are the most active surrogates. They specialize in training police cadres and intelligence operatives, penetrating local governments, and developing local communist parties and front organizations. To a lesser extent, Hungarian, Czechoslovakian, and Bulgarian involvement has been noted in Sub-Saharan Africa and the Middle East.

The Soviet Union has also sought international political leverage, either through active coordination and support or tacit acquiescence in local actions, when other nations' aims coincide with its own. Examples are Vietnam's military operations in Southeast Asia and Libya's support for a variety of radical and terrorist causes, particularly in the Horn of Africa.

Soviet military power-projection forces, discussed later in this Section, are well integrated into these activities. To support its global military activities, the Soviet Union has sought and gained overflight rights and access to support facilities in a number of countries (note Map 2-1). Soviet global activism, particularly in areas of instability, presents the United States with new and challenging political and military problems. With the preceding general overview of Soviet international political-military activities as a backdrop, a more detailed discussion of Soviet military forces, as compared to those of the United States and its allies, follows.

## THE MILITARY BALANCE

### General

The Soviet Union has pursued a steady program of military force growth and modernization over the past two decades. Since 1971, the USSR has outspent the US in virtually every category of military investment and operating costs. For example, its expenditures for strategic offensive forces were nearly double those of the US, and the Soviets spent 50 percent more than the US for general purpose forces. This Soviet commitment to improving the full spectrum of its military capabilities, combined with US and allied failure to keep pace, has helped to negate qualitative advantages previously held by the West.

In assessing the military balance between the Soviet Union and the United States, both the quantity and quality of each force must be considered. Qualitative factors, such as training, morale, leadership, geography, timing, and military judgment, are significant in evaluating this balance of forces. In the end, however, the significance of military balance analysis lies less in its precise dimensions than in the broader insights provided to strategic planners.

The following assessment will apply both quantitative and qualitative measures to evaluate the strengths and weaknesses of US forces in three major categories — strategic nuclear, nonstrategic nuclear, and conventional. In assessing conventional forces, the capabilities of the United States and its allies will be discussed in relation to those of the Soviet Union and its allies in various regions of US interest: Europe, Southwest Asia, the Pacific, Latin America, Africa, and the ocean areas.

### Strategic Forces

Over the past two decades, the balance of strategic nuclear power has shifted steadily toward the Soviet Union. Since the Cuban missile crisis and the attendant

**STRATEGIC NUCLEAR FORCES**

**ICBMs**

| U.S. | | USSR | |
|---|---|---|---|
| 49 | TITAN | SS-11 | 1398 |
| 450 | MINUTEMAN II | SS-13 | |
| 550 | MINUTEMAN III | SS-17 | |
| 1049 | | SS-18 | |
| | | SS-19 | |

**SLBMs**

| U.S. | | USSR | |
|---|---|---|---|
| 304 | POSEIDON | SS-N-5 | 950 |
| 240 | TRIDENT I | SS-N-6 | |
| 544 | | SS-N-8 | |
| | | SS-N-17 | |
| | | SS-N-18 | |
| | | SS-NX-20 | |

**BOMBERS**

| U.S. | | USSR | |
|---|---|---|---|
| 31 | B-52D | BEAR | 250 |
| 151 | B-52G | BISON | |
| 90 | B-52H | BACKFIRE | |
| 56 | FB-111 | | |
| 328 | | | |

**APPROXIMATE TOTALS**

| | U.S. | USSR |
|---|---|---|
| DELIVERY VEHICLES | 1921 | 2598 |
| • MISSILES | 1593 | 2348 |
| • BOMBERS | 328 | 250 |

AS OF 1 JANUARY 1983, PAA

*CHART 2-2*

## STRATEGIC MISSILE FORCES

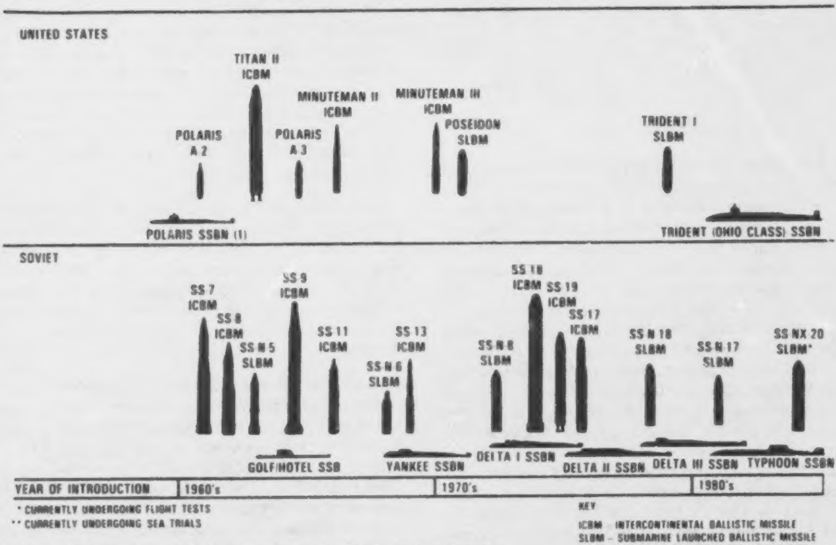


*CHART 2-3*

Soviet political humiliation, the USSR began a massive program of strategic force modernization. This modernization included the deployment of updated Intercontinental Ballistic Missiles (ICBMs), submarines, and bombers. US strategic force modernization has not kept pace (see Charts 2-2 and 2-3). The Soviet Union, having broadly enhanced its ability to engage in and endure a nuclear conflict, now enjoys significant advantages in certain measures of nuclear forces.

### Offensive Systems

#### *Soviet Forces*

Since the early 1960s, the Soviet Union has emphasized improvements to its strategic forces, particularly the ICBM force. To move toward strategic superiority, the USSR has focused on modernizing its ICBM forces by deploying new systems and modifying deployed systems. These initiatives have yielded more Soviet warheads per missile, greater warhead throw-weight, improved command, control and communications ($C^3$), and improved weapon accuracy.

The Soviets also continue to strengthen their Submarine-Launched Ballistic Missile (SLBM) forces. The new Soviet TYPHOON-class submarine, larger than the TRIDENT and carrying SS-NX-20 missiles, is undergoing acceptance trials. It will soon join a fleet of DELTA and YANKEE-class submarines which already outnumber US nuclear-powered ballistic missile submarines (SSBNs). Like the DELTA, TYPHOON will provide the Soviet Union with longer-range SLBMs and the capability to launch against targets in the United States from Soviet home waters.

SOVIET DELTA SUB

SOVIET YANKEE SUB

The mainstays of the Soviet strategic bomber force are the older BEAR and BISON. The modern BACKFIRE bomber, probably designated for a theater attack role in the initial phases of conflict, also has sufficient range to attack the United States on one-way missions. For the future, however, the Soviet Union is expanding its bomber force capabilities. The BACKFIRE has been operational since 1974, and some 30 additional aircraft are produced annually. The USSR is also testing both a longer-range bomber and cruise missiles similar to those the US is now deploying. Specifically, a new Soviet heavy bomber, BLACKJACK A, is in flight testing and appears comparable in many respects to the B-1. Some 20 percent larger than the B-1, it has a variable sweep wing design. It is similar in construction to the B-1 and like its US counterpart appears designed for low-altitude strategic penetration missions. It is expected to join their force by 1986 or 1987, and will significantly improve Soviet intercontinental strike capability — probably as a cruise missile carrier.

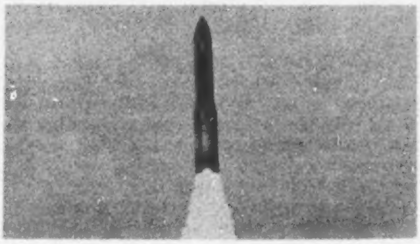
B-1 BOMBER

*US Forces*

US strategic nuclear forces form a TRIAD of complementary and independent systems, consisting of land-based ICBMs, manned bombers carrying air-to-surface missiles and gravity bombs, and SLBMs. Each element of the TRIAD enhances the survivability and probability of success of the others by compounding the defensive problems of a potential adversary, and increases the capability for flexible and measured retaliation. Primary concerns with the US TRIAD are: (1) the growing vulnerability of the ICBMs and their declining effectiveness against increasingly hardened Soviet targets, (2) limitations of SLBMs against hardened targets, (3) increasing risks faced by US strategic bombers (B-52s) seeking to penetrate Soviet defenses, and (4) an increasing number of Soviet targets which are mobile, difficult to precisely locate, or hardened. A major concern affecting all elements of the TRIAD is the prospect that, following a nuclear attack, communications between the National Command Authorities (NCA) and strategic nuclear forces could be interrupted.

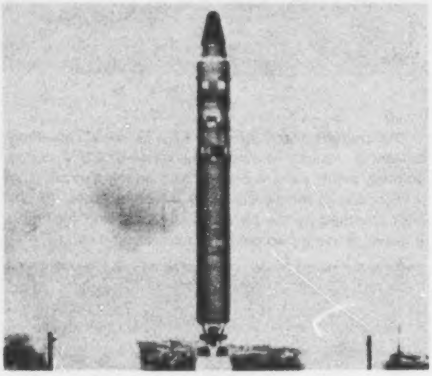
ICBM vulnerability is a problem affecting the current US strategic TRIAD. The Soviet ICBM force has evolved from a few missiles with multi-megaton warheads and limited accuracy to a very large force possessing multiple, independently-targetable reentry vehicles (MIRVs) with sufficient accuracy and warhead yield to threaten the survivability of the US ICBM force in an initial attack.

Despite its vulnerabilities, the US ICBM force remains capable of effectively striking a broad range of targets. US ICBMs can accurately deliver high yield single or multiple nuclear warheads at long range (5,000-7,000 nm) in about 30 minutes. US ICBM force improvements have resulted in consistently high missile alert rates, redundant and intrusion secure communications, increased accuracy and yield, and comparatively low operations and maintenance costs. MINUTEMAN III is a long-range missile which can be remotely retargeted and launched within minutes, with an accuracy that provides a wide range of employment options, particularly against hard targets. The single Reentry Vehicle (RV) on each MINUTEMAN II is effective against soft, large-area targets and single, isolated targets. Launch of MINUTEMAN III missiles can be initiated from airborne command posts. Additionally, some modified MINUTEMANs can launch an Emergency Rocket Communications System (ERCS) to provide alternative communications with the nuclear force under surprise attack conditions.



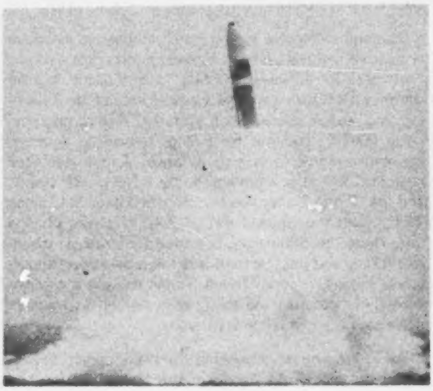
MINUTEMAN III LIFT OFF

The oldest ICBM, the TITAN II, provides the greatest large-area, soft-target destruction capability of any US missile system. Due to age and design, however, these missiles cost more to maintain and operate than MINUTEMAN. Therefore, phase out of the TITAN II has begun.



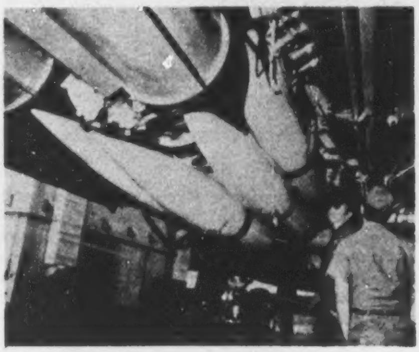
LAUNCH OF A TITAN II

The US SSBN/SLBM force possesses the highest survivability and best on-alert endurance of the TRIAD. The security of extended operations at sea provides a high degree of deterrence since the Soviet Union cannot neutralize the SLBMs at sea in a first strike. These qualities make SLBMs an important strategic reserve. POSEIDON nuclear-powered ballistic missile submarines (SSBNs), constructed between 1961 and 1967, are programmed for retirement during FY 1993-1999. These submarines each carry 16 POSEIDON (C-3) missiles, with an average of 10 MIRVs, except for 12 submarines modified to carry the TRIDENT I (C-4) missile. This TRIDENT missile, carrying eight RVs, has greater warhead yield, accuracy, and range than the POSEIDON (C-3) missile. With its extended range, the TRIDENT submarine creates a greater antisubmarine warfare (ASW) problem for the Soviet Union. It can position for attack faster as a result of its larger potential operating area and can attack the Soviet Union from many directions.

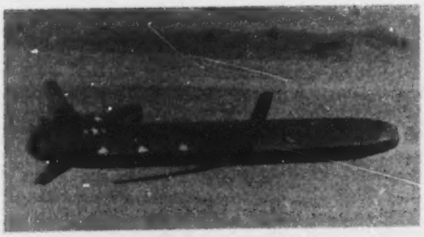


TRIDENT 1 (C-4) MISSILE

The bomber leg of the TRIAD complements other strategic forces because of its force employment flexibility and hard target kill capability. The manned bomber can accurately deliver large, diversified payloads to distant targets. It can also change targets in flight, take new routes, and conduct other missions that would be impossible for a preprogrammed missile system. Air delivery of highly accurate gravity weapons permits immediate battle damage assessment and provides the capability to strike mobile and imprecisely located targets. The bomber-launched Short-Range Attack Missile (SRAM) and the Air-Launched Cruise Missile (ALCM) enhance targeting and routing flexibility and reduce bomber exposure to current and projected Soviet air defense systems. ALCMs have the accuracy required to destroy hard targets. This mixed force of



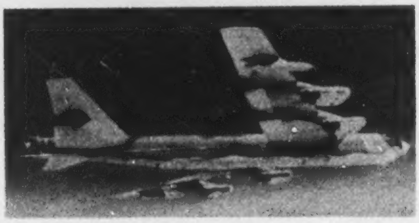
SHORT RANGE ATTACK MISSILES (SRAM)



AIR-LAUNCHED CRUISE MISSILE (ALCM)

penetrating bombers and air-launched missiles prevents Soviet concentration of defenses on any narrow flight route or on a single attack system. Pre-attack launch of the alert bomber force provides additional flexibility and airborne survivability, while retaining command and control after launch. Manned aircraft also provide a unique restrike capability. They can be recovered and reconstituted for subsequent missions. To counter the US bomber force and US tactical aircraft, the Soviets have had to spend massive amounts for air defense, thus diverting funds from other important military investments.

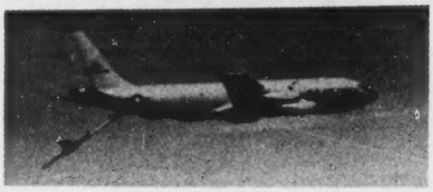
The backbone of the current strategic bomber force is the the aging fleet of B-52s. The oldest version, the B-52D, first entered the inventory in 1955 and will soon be phased out of the active inventory. B-52Gs, now serving in an enemy airspace-penetrator role, will carry standoff cruise missiles and assume conventional weapons delivery and maritime roles in the late 1980s. The newest model, the B-52H, will serve in a penetrator role for a number of years, and as a standoff attack, cruise missile carrier through the end of the century. The newest bombers are the FB-111s, last produced in 1969. With improved avionics, high speed at low altitude, automatic terrain contour flight capability, and advanced electronic countermeasures, FB-111s are effective penetrating aircraft, and can deliver a mix of gravity weapons and SRAMs.



B-52

FB-111

The current force of 615 KC-135 aerial refueling tankers is required to extend the range of US strategic bomber, airlift, tactical fighter, and attack aircraft. The primary role of this tanker force, which includes 128 aircraft operated by the Air National Guard and Air Force Reserve, is to support plans for nuclear retaliation.

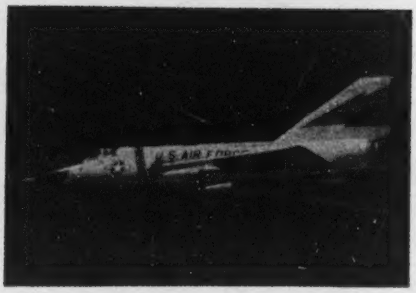


KC-135 TANKER

Defensive Systems

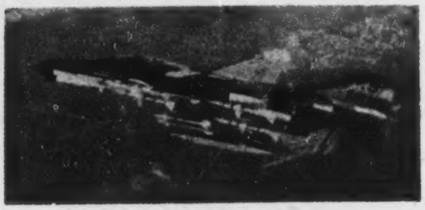
Strategic defensive systems are categorized as active or passive. Active systems include interceptor aircraft, Surface-to-Air Missiles (SAMs), and Ballistic Missile Defense (BMD). Passive defenses include tactical warning and attack assessment systems, electromagnetic pulse (EMP)/structural hardening, electronic counter-countermeasures, and civil defense. Active defenses against ICBM attack are limited by a US-USSR treaty, and the United States has had no BMD capability since 1976, when the single SAFEGUARD site was phased out. Thus, the deterrence provided by strategic offensive forces and passive defenses takes on added importance. Finally, for the United States to field a credible continental defense, the ability of all elements to survive a nuclear attack must be improved.

As ballistic missiles became the predominant Soviet threat against North America, the United States and Canada systematically reduced North American air defense capabilities. The Distant Early Warning (DEW) line



F-106A

and US coastal radars do not provide sufficient surveillance at all altitudes for timely warning or defense against airbreathing threats to the continental United States (CONUS). Moreover, most aircraft currently assigned to strategic defense (including 153 F-106s, 90 F-4s, and 18 F-15s operated by active Air Force, Air Force Reserve, and Air National Guard units) are more than 20 years old, with range, fire control, communications, and armament limitations which reduce their effectiveness against low-altitude air attacks. Consequently, as the Soviet Union develops a modern cruise missile force, current systems will be inadequate to detect these missiles and defend the US. Even against today's bomber threat, serious gaps in air defense capability exist. To remedy these deficiencies in air defense, a Department of Defense (DOD) North American Air Defense Master Plan, developed in consultation with Canada and including a force modernization program, was sent to Congress in 1982.



F-4 PHANTOM

F-15 EAGLE

A balanced program of strategic offensive and defensive forces should include civil defense, an effective continuity of government program, emergency mobilization, and a secure and survivable communications system. The United States civil defense program is modest, concentrating on planning for crisis relocation within selected areas. Conversely, the Soviet Union has elected to build the most extensive civil defense program in the world. Investing more than $3 billion annually, the USSR employs about 115,000 personnel full time to manage and exercise their program. A sheltering program exists for Soviet government personnel and 11 percent of the urban population. Almost half of the shelter spaces are for essential workers, and much of the urban population is supported by a large-scale evacuation program.

In summary, US strategic force-modernization efforts have not kept pace with the accelerated improvement of Soviet capabilities. As a consequence, existing US strategic forces represent capital investments made in the 1950s and 1960s. Strategic forces are only one part of a balanced defense program, but it is essential that these forces be adequate to deter nuclear attack.

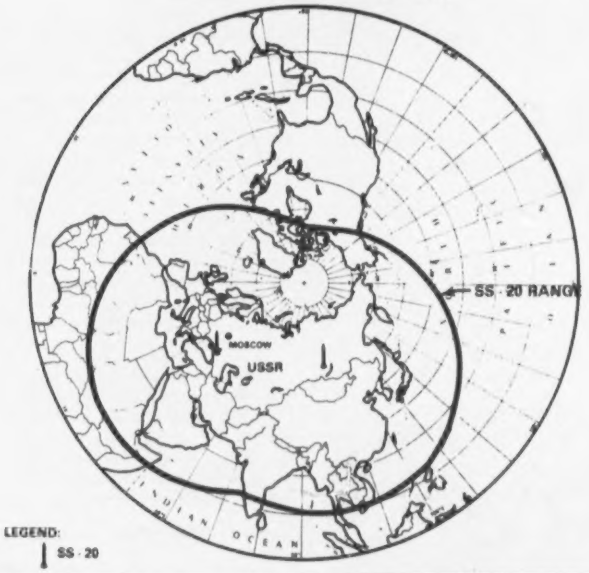
### Nonstrategic Nuclear Forces

Although strategic forces would respond to many of the challenges faced by the United States, other types of nuclear forces provide an essential deterrent and warfighting link between conventional and strategic nuclear forces. Nonstrategic Nuclear Forces (NSNF), consisting of land-based systems for battlefield support and theater-wide strikes, and sea-based systems for surface antiship, air defense, antisubmarine, and strike warfare missions, fulfill this mission.

NSNF support conventional forces in deterring conventional, theater nuclear, and chemical attack. If deterrence fails, these forces provide capabilities to respond in kind to theater nuclear attack or to escalate the intensity of the conflict in a controlled manner. Accordingly, NSNF must have a wide range of weapon employment options.

The NATO countries maintain NSNF through participation in nuclear weapons control procedures (Programs of Cooperation (POC)) with the US, in which the US retains control over the nuclear warheads. The primary modernization of NATO's NSNF in the 1970s was the replacement of obsolete HONEST JOHN rockets and SERGEANT guided missiles with a lesser number of LANCE surface-to-surface missiles. The 1979 NATO decision to modernize longer-range intermediate-range nuclear forces (LRINF) will result in the first land-

## SS - 20 COVERAGE FROM SOVIET BASES



AS OF 1 JANUARY 1983 *CHART 2-4*

based, long-range missiles deployed to NATO in over two decades, the PERSHING II and the Ground-Launched Cruise Missile (GLCM).

Soviet gains in NSNF over the last 10-12 years may be more substantial than those in the strategic nuclear area, yet these gains are seldom publicized. During this period, the Soviet Union has introduced three new tactical missiles, the SS-21, SS-22, and SS-23. It has also introduced self-propelled models of the 240mm mortar and the 203mm and 152mm guns. These improvements have greatly increased Soviet capabilities in nuclear artillery and short-range nuclear missiles.

Soviet LRINF modernization escalated dramatically with deployment of the mobile SS-20 missile, which can strike targets anywhere in Europe or Asia from the USSR (Chart 2-4). This missile system carries three MIRVs and has greater range and accuracy than the older, fixed SS-4 and SS-5 missiles it replaces. The Soviet Union now has over 300 SS-20 launchers deployed, carrying nearly 1,000 warheads. Combining the SS-20 with SS-4 and SS-5 missiles, the USSR has more than 1,200 land-based LRINF missile warheads deployed, and at least that many additional warheads available in refire missiles. In contrast, NATO has deployed no comparable weapons. Even when the PERSHING II and GLCMs are deployed in Western Europe, the numerical balance in LRINF will decidedly favor the Soviet Union.

Most non-US NATO support for Supreme Allied Commander, Europe (SACEUR) nuclear requirements consists of approximately 600 dual-capable (conventional or nuclear) tactical aircraft, two Federal Republic of Germany (FRG) PERSHING IA missile wings, and the United Kingdom's (UK) POLARIS SSBNs. UK BUCCANEER and JAGUAR aircraft provide additional air-delivered NSNF capability. Most aircraft, however, have limited range in the high-speed, low-altitude, strike profiles required to evade sophisticated and densely deployed Warsaw Pact air defenses. With the exception of the US F-111 and A-6 aircraft, NATO lacks a manned, all-weather, low-level, weapons delivery capability. Individual national modernization programs, such as the replacement of Belgian and Dutch F-104s with F-16s in the early 1980s, will help modernize NATO's nuclear capable forces. However, neither the F-16 nor other new NATO aircraft, such as the TORNADO, have the range to strike interdiction targets deep in the Soviet Union.

The UK also maintains SLBM forces consisting of four RESOLUTION-class ballistic missile submarines, each of which carries 16 POLARIS A-3 missiles. After all missiles are launched, the submarines are tasked to support Supreme Allied Commander, Atlantic (SACLANT) ASW operations. The UK has plans to purchase US TRIDENT missiles to replace its POLARIS systems in the 1990s.

Allied and US Short-range Nuclear Force (SNF) delivery systems provide the only NSNF numerical parity now held by NATO, although the Soviet Union has doubled the Warsaw Pact's capability in SNF since 1970. NATO SNF will undergo partial modernization in the FY 1985-1992 timeframe.

NIKE HERCULES SAM launchers, located in West Germany as part of the NATO air defense system, can also fire against surface targets. However, the US plans to replace the obsolescent NIKE HERCULES with the advanced, conventionally-armed PATRIOT system. Some allied nations have expressed their intent to do likewise.

### Conventional Forces

Although nuclear war poses the primary danger to the national survival of the United States and its allies, our collective defense efforts must continue to focus on conventional forces. Over 185 Soviet divisions and large Soviet surrogate forces armed with conventional weapons pose an immense threat to US and allied interests. Some or all of these forces may be used in the future, and the threat of the use of nuclear weapons will not deter many potential conflicts involving these conventional forces. As US superiority in nuclear forces declined over the past decade, the deterrent responsibilities of our conventional forces increased correspondingly. Strong US conventional forces also reduce the probability of nuclear weapons use once conflict begins. Finally, conventional forces are the most credible means of deterring or containing local and regional conflicts, and thus minimize the probability of escalation to general war.

During 1982, combat in the South Atlantic and in Lebanon demonstrated the importance of force readiness and esprit, as well as the flexibility and decisiveness of modern conventional weapons. Conventional forces can also project a moderating influence abroad, particularly when complementing diplomacy by participation in international peacekeeping missions. As examples of this role, a US Army battalion is serving with the Multinational Force and Observers (MFO) in the Sinai, and US Marines are part of the Multinational Force (MNF) in Lebanon.

### NATO and Warsaw Pact Forces in Europe

During the 1970s, the Warsaw Pact increased its advantage over NATO in conventional force capability. This was accomplished by a massive modernization effort which enabled the Warsaw Pact to increase its quantitative advantage in virtually every category of ground weaponry. Even more serious was the Warsaw Pact's parity with NATO technological levels in fielded ground combat equipment, and its dramatic increases in both offensive and defensive air combat capability.

Despite programmed improvements in US conventional forces, NATO is not keeping pace with Warsaw Pact force enhancements. For the decade of the 80s, it appears that the Warsaw Pact will continue to develop forces for rapidly achieving military objectives in Europe. This Soviet momentum will exploit mobility and firepower advantages through continued modernization, refined combined arms organization and doctrine, and improved command and control. In particular, new Soviet emphasis on tactics stressing rapid penetrations of NATO rear areas by mobile Operation Maneuver Groups presents serious challenges to NATO's strategy of forward defense and flexible response by reducing the time and response forces available for NATO escalation decisions.

Charts 2-5 through 2-7 list totals of major weapon systems by type for NATO and Warsaw Pact active and reserve units. The comparisons reflect total US and USSR force structure, including Soviet forces deployed opposite the People's Republic of China (PRC) (approximately 25 percent of total Soviet ground and tactical air forces). Significant redeployment of these Soviet forces from the Far East to other theaters is unlikely in the near future, despite Sino-Soviet efforts to relieve tensions. Although these charts include assets that probably would not be committed initially to a war in Europe, they depict forces that both sides could use for reinforcement.

Chart 2-5 depicts a NATO ground force numerical disadvantage. The Warsaw Pact advantage continues to grow with the introduction of new tanks, self-propelled artillery, armored infantry combat vehicles, and modern air defense missile systems. The Warsaw Pact has a

## 1982 VS 1988
## GROUND FORCES COMPARISON

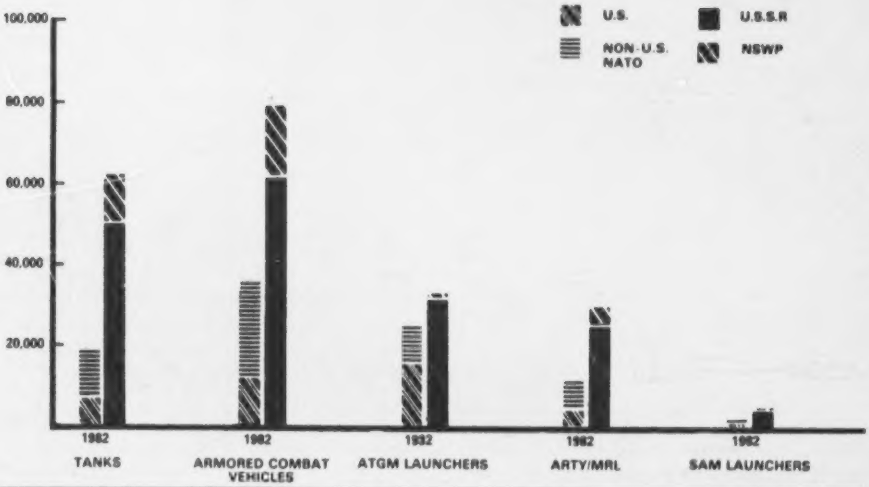


***CHART 2-5***

greater than 3 to 1 advantage in tanks and is expected to maintain this advantage despite continued deployment of several new NATO tanks, including the American Abrams (M1) and the German LEOPARD II. The Warsaw Pact has, in fact, countered NATO's armor modernization program through large-scale deployment of Soviet T-64 and T-72 tanks. These modern Soviet tanks currently constitute approximately 20 percent of the Warsaw Pact tank inventory.

SOVIET T-64 TANK

SOVIET T-72 MAIN BATTLE TANK

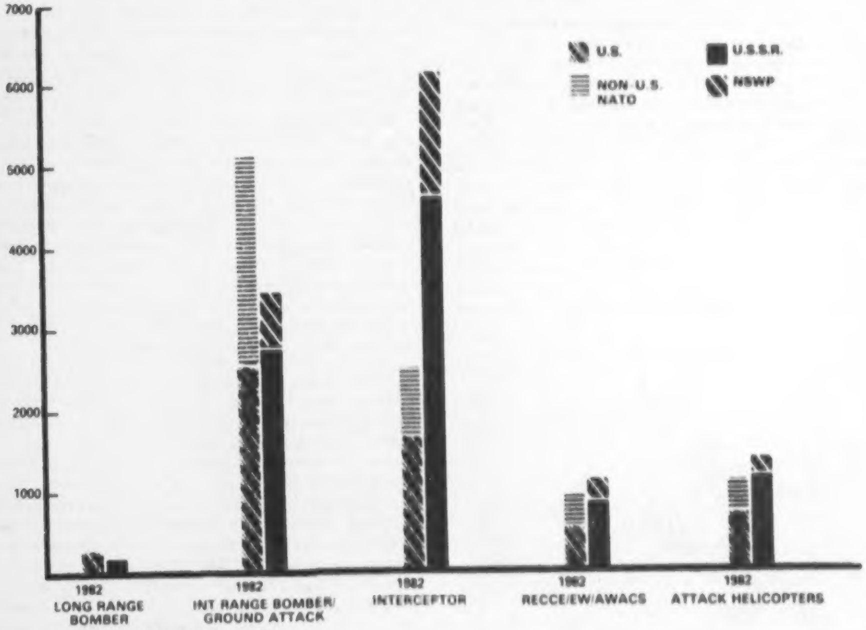
The Warsaw Pact is projected to increase its advantage in antitank guided missiles (ATGMs), and will field about 7,000 antitank guns. The large imbalance between Warsaw Pact tanks and NATO antitank weapons is redressed to some degree by the major contributions of close air support (CAS) aircraft and attack helicopters which would be employed to engage enemy armor.

The disparity in artillery and Multiple Rocket Launchers (MRL), antiaircraft artillery, and SAM launchers also weighs heavily in the Warsaw Pact's favor. To a limited degree, Warsaw Pact numerical advantages in artillery are currently offset by NATO technological superiority, such as in fire-control systems.

As an integral part of its combined arms doctrine, the Warsaw Pact maintains a strong, ground-based, air defense, with many systems available at all levels of command to counteract NATO aircraft. At the regiment, low-altitude weapons include the ZSU-23/4 gun system, and the SA-9 and SA-13 SAMs; at division, the SA-6 and SA-8 SAMs cover low-to-medium altitudes; and at the Front and Army, the SA-4 covers medium-to-high altitudes. This impressive, mobile, all-weather, air-defense umbrella not only provides basic protection to Warsaw Pact ground troops, but also frees Soviet fighter aircraft for interdiction and counter-air roles.

The air balance between NATO and the Warsaw Pact reflects the differing mission requirements for tactical air set by the opposing alliances. Although NATO relies on attack aircraft and helicopters to partially offset the large ground force firepower imbalance, the Warsaw Pact, with its heavy emphasis on armor and artillery in a combined arms role, has been able to devote a large portion of its air assets to other missions. Chart 2-6 provides a comparison of the air balance worldwide for 1982. The Warsaw Pact emphasis on air superiority is apparent. Over half of its fixed wing combat aircraft are assigned this role, resulting in a 2.5 to 1 Warsaw Pact

**1982 VS 1988**
**COMBAT AIRCRAFT COMPARISON***



* NAVAL AIRCRAFT INCLUDED

*CHART 2-6*

numerical advantage in interceptors. In contrast, NATO, which assigns over half of its fixed wing aircraft to the air-to-ground mission, has a substantial numerical advantage in this area. Of particular significance is the fact that the Warsaw Pact has erased NATO's numerical advantage in attack helicopters, and is gaining operational experience with these aircraft.

AH-1S COBRA/TOW HELICOPTER

The Warsaw Pact is increasing its emphasis on the ground attack role with the deployment of new aircraft and advanced attack helicopters. Combined with recent improvements to systems for the command and control of air assets, Soviet tactical air represents a modern and steadily improving force. It is clear that control of the airspace in the battle area will be critical, not only to allow exploitation of NATO attack aircraft and helicopters, but also to prevent the Warsaw Pact from effectively employing its attack helicopters or other attack aircraft against NATO ground forces. Although NATO possesses a qualitative edge in fixed wing aircraft, this advantage continues to be reduced. Significant Warsaw Pact numerical advantages in interceptors and ground-based air defense systems could place NATO air superiority in doubt.

SOVIET HIND-E HELICOPTER

The Warsaw Pact also holds major advantages over NATO in the critical areas of chemical and electronic warfare. In Chemical Warfare (CW), the Warsaw Pact is continuing to upgrade its capabilities to conduct offensive CW operations. Soviet doctrine calls for the use of chemicals, and Warsaw Pact forces are well equipped for CW operations. Coordinated training by Warsaw Pact countries has emphasized operations and survival on contaminated battlefields, and occasional use of chemical agents during large-scale Warsaw Pact exercises has confirmed a high state of readiness. Non-Soviet Warsaw Pact forces CW proficiency is improving rapidly.

NATO has only marginal offensive and defensive CW capabilities. NATO's chemical defense posture is inadequate for extended operations in a contaminated environment. In addition, the present limited stockpile of chemical munitions for offensive employment is inadequate to deny the Warsaw Pact a significant military advantage from chemical use — NATO weapons will not force Warsaw Pact forces to adopt the same restrictive protective posture imposed by the Warsaw Pact chemical threat. Major improvements in CW protective and retaliatory capabilities are imperative if NATO is to have an effective CW deterrent.

Radio Electronic Combat (REC) equipment and tactics and "MOSKIROVKA" (Soviet deception techniques) give the Warsaw Pact an integrated capability to deceive NATO commanders and to disrupt their $C^3$ nets and air defenses. The Soviet Union has made a strong commitment to REC by deploying hardened and redundant battlefield $C^3$ systems, modern jamming battalions, and dedicated jamming aircraft in the Warsaw Pact area. In this regard, NATO communication satellites, tactical communications, and US sensor systems are all vulnerable to jamming. NATO does not possess EW programs and systems in comparable quantities.

In attempting to compare the complex NATO and Warsaw Pact $C^3$ systems, one aspect is fundamental — the basic difference in the member relationships within the two alliances. The Soviet Union dictates uniform $C^3$ system standards throughout the Warsaw Pact nations, while NATO $C^3$ system standards are uneven and are developed through compromise among competing systems. Current NATO $C^3$ systems are far from interoperable, thus giving the Warsaw Pact significant advantages in disrupting NATO command and control. NATO has undertaken a number of initiatives to provide interoperable, jam-resistant, and survivable $C^3$. As one example, the NATO Airborne Early Warning (NAEW) system, an allied version of the US Airborne Warning and Control System (AWACS), is significantly improving NATO air battle management. The long-range, low-altitude coverage of the NAEW system thus provides a force multiplier for countering numerically superior Warsaw Pact aircraft. When the NAEW capability is fully integrated into an interoperable NATO C³ system, its full command and control potential will be realized.

At sea, NATO's defense of the North Atlantic SLOCs leading to Europe has the highest strategic priority. In the Atlantic, the challenge to US security interests from Soviet conventional forces continues to grow because of the Soviet submarine and aircraft threat to the SLOCs between the United States and Western Europe.

At present, US and allied forces in the Atlantic are thinly spread. Given current naval force levels, readiness, and sustainability, the Atlantic Fleet cannot insure successful, simultaneous engagement of all Soviet naval forces throughout the theater. Moreover, the shortfall in amphibious lift constrains US ability to execute NATO war plans.

The Mediterranean SLOC is vital to Western Europe, particularly as a result of the substantial amount of Middle East oil which is transported through the region. The Soviet submarine, air, and surface threats to the SLOCs and NATO maritime forces in these vital areas are serious and increasing.

Soviet preeminence in mine warfare adds another dimension to the naval threat which NATO is particularly ill-prepared to address. The Soviet land-based, long-range, air threat to maritime forces is also of special significance in view of its inherent flexibility to concentrate against naval forces within range.

Chart 2-7 depicts NATO and Warsaw Pact naval force levels. The trend in the Soviet Navy is toward larger and

## 1982 VS 1988
## NAVAL FORCES COMPARISON

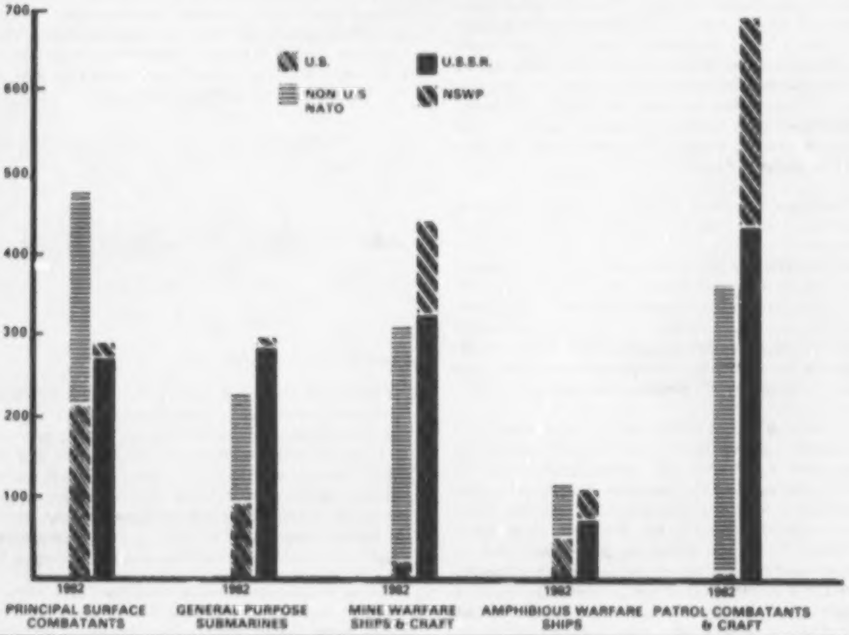


*CHART 2-7*

more capable ships with more specialized naval aircraft aboard. US and allied force planning must include emphasis on integrated strategy and tactics to counter these expanding Soviet naval capabilities.

The military success of the NATO Alliance, should deterrence fail, will be heavily dependent upon a timely decision to mobilize and deploy forces, the time available for mobilization, the en route survivability of US reinforcements, and the sufficiency of munitions and other consumable supplies available in the theater.

## The Alignment of Forces in Southwest Asia

Political, economic, and social instabilities, regional conflicts, and growing Soviet power-projection capabilities continue to make the Middle East-Southwest Asia region one of the most volatile and potentially dangerous for US and allied vital interests. Given the region's strategic location and resources, Soviet or Soviet surrogate dominance there would have significant ramifications for Western interests. The economies of many industrialized countries, particularly those of Western Europe and Japan, depend on continued access to adequate supplies of oil from the Middle East. Although the United States is less dependent on that oil supply than most of its key allies, the close interrelation of Western economies makes it extremely unlikely that the United States or its major allies could insulate themselves from the loss of Middle East oil.

The Soviet invasion of Afghanistan in late 1979 demonstrated a willingness to apply direct military force to achieve political objectives. This was also the first time since World War II that the Soviet Union employed regular units of its forces outside the borders of the Warsaw Pact. Should the Soviet Union decide on further military moves in Southwest Asia (SWA), one scenario could include a full-scale invasion of Iran. To accomplish this, the Soviet Union could generate a sizable force from the Soviet military districts adjacent to Iran.

Although a Soviet SWA invasion force would possess numerical advantages in both personnel and equipment over US forces, the attack could encounter serious obstacles. Iran's harsh environment and rugged terrain, with limited access routes through the Alborz and Zagros Mountains to the Gulf area, could create chokepoints, impede Soviet troop progress, and canalize Soviet forces, making them vulnerable to interdiction. Large Soviet forces would be needed for logistical support and rear-area security, and Soviet aircraft would have to operate without adequate ground control radar support and from minimum-capability airfields.

US forces operating in the SWA region would face the same geographic and climatic conditions as the Soviets. Furthermore, our forces would be hampered by extremely long air and sea routes from the US; insufficient strategic and intratheater airlift; lack of established supporting logistical infrastructure and long distance communications; limited US access agreements for force staging, basing, or transit rights; and limited $C^3$ capability. To counter these deficiencies, a number of initiatives have been undertaken to enhance the US capability to deploy and sustain forces there. An important example is the pre-positioning of equipment and supplies aboard the 17 Near-Term Pre-positioning Force (NTPF) ships located in the area. The most significant improvements, in addition to the continuing naval presence in the Indian Ocean, are those that will be associated with the establishment of the US Central Command (USCENTCOM). (The new command is described in more detail in the Appendix.) Although these improvements will not ensure the capability to defeat the Soviet Union in all cases, US capability to deter an attack is significantly improved by the establishment of an area-dedicated, joint headquarters possessing integrated air, ground, and naval forces. The prospect of actual combat with the United States and its allies may be the ultimate deterrent to Soviet aggression.

PART OF THE NTPF

## East Asia And The Pacific

The Pacific area is a focal point of US interests because of its resources, political influence, and location. In terms of global military strategy, the region plays an important role in deterring a Soviet attack against NATO. Prior to such an attack, Soviet planners would require a secure flank in Asia. Forward deployed US forces aid in maintaining the necessary regional stability. These forces include almost half the US peacetime naval force, which signals the value accorded this region.

Soviet forces constitute the most significant military threat to regional security and deployed US military forces. North Korean and Socialist Republic of Vietnam (SRV) forces, though less capable, could play a significant role in any East Asian conflict against US and allied forces. Since the late 1960s, Soviet ground forces in the Soviet Far East military districts have nearly tripled, and presently consist of approximately 50 divisions. Primarily oriented to the Sino-Soviet frontier, these forces are a major factor in the military balance in Northeast Asia. The Soviet Union maintains a fleet of more than 200 surface ships and submarines in the region, as compared to the total US Pacific naval force of about 150. Concurrent with developing naval operating bases in Southeast Asia, the Soviet Pacific Fleet Air Force of 390 combat aircraft has increased maritime operations over the lines of communication (LOCs) in the South China Sea. The Soviet naval presence in the Indian Ocean threatens vital allied economic SLOCs and supports radical client states such as the People's Democratic Republic of Yemen and Ethiopia. The PRC indirectly contributes to US global and regional security as a counterweight to Soviet land power in Asia.

US naval forces normally assigned in the area in peacetime consist of six aircraft carriers with their air wings, over 80 surface combatants, 44 attack submarines, 1 SSBN, 31 amphibious ships, 12 ASW patrol squadrons, and 2 Marine Amphibious Forces, each with a Marine Division and Air Wing. Although, these forces are capable of sequential operations to keep the Western Pacific and Indian Ocean sea lanes open in a conventional war with the Soviet Union, they could not succeed should the upward trend in Soviet naval capability continue without corresponding improvements in US and allied naval forces.

US air forces deployed in Korea, Japan, the Philippines, and Guam consist of 10 tactical fighter squadrons totaling over 200 aircraft, 2 squadrons of intratheater transport aircraft, and a complement of E-3A Airborne Warning and Control aircraft (AWACS). In addition, a squadron of B-52s and a squadron of aerial tankers are based at Guam. US ground forces in the area consist of two divisions, one in Korea and one in Hawaii.

The Republic of Korea (ROK), a growing regional power, is an important ally and significant trading partner. The ROK holds a pivotal position in maintaining peace and stability in the area. The ROK possesses the largest allied ground force in the region, but faces a numerically superior North Korean Army. The North Korean Air Force has a 2 to 1 advantage in combat aircraft. About one-third of these are older generation Soviet jet fighters. The ROK possesses modern combat aircraft, most with better range, avionics, and weaponry than those of North Korea. In the Yellow Sea and Sea of Japan, the North Korean Navy operates attack submarines, attack missile boats, amphibious craft, and numerous small surface combatants. In addition to providing coastal defense, these naval forces can mine ROK ports, interdict SLOCs, and conduct amphibious assaults. Since 1980, North Korean shipyards have accelerated production of missile attack boats and new amphibious landing craft. To counter a North Korean naval campaign in the region and ensure allied resupply capability, US forces would be required to augment the ROK Navy.

A continued US force presence on the Korean Peninsula and in Northeast Asia is mandatory to deter aggression and to maintain stability. Critical readiness and war reserve materiel shortfalls continue, but efforts to overcome them are ongoing. In wartime, US logistics, naval, and air support would be critical to the defense of the ROK. The North Korean buildup and modernization of its armed forces continues.

Japan plays a vital role in maintaining stability in the Asia-Pacific region. Japanese cooperation, an essential component of US strategy for Asia, is evident in bilateral defense planning and support for US forces forward deployed in Japan. In addition, Japanese overseas economic assistance programs provide substantial support to regional stability. To enhance US-Japanese security, the relationship with Japan is being transformed into a more active defense partnership in which Japan should increase substantially its capabilities to provide for the defense of its own territory, its surrounding seas and skies, and its sea lanes out to 1,000 miles from the home islands.

Like most Pacific nations, the Philippines maintain military forces which are tailored for homeland defense and internal security. Philippine bases, primarily Clark Air Base and Subic Bay, are valuable to US strategy. Providing key logistics and supply facilities which permit transshipment to the Western Pacific and the Indian Ocean areas, these bases are important to the maintenance of US military presence in these regions.

The United States remains committed to support Thailand against external aggression. The primary threat to Thailand is the SRV, which continues to employ military force against neighboring Kampuchea in its pursuit of hegemony in Southeast Asia. The SRV, with Soviet encouragement and support, is expected to continue to occupy Kampuchea and maintain a dominant influence over Laos. SRV "hot pursuit" incursions into Thailand are likely to keep tensions high in border areas.

In addition to continuing its long-standing defense ties with the Philippines and Thailand, the United States is seeking to strengthen the military capabilities of the other members of the Association of South East Asian Nations (Indonesia, Malaysia, and Singapore).

Australia and New Zealand continue to be key stabilizing influences in the Southern Pacific region because of their active roles as parties to the Australia-New Zealand-United States (ANZUS) Treaty. Both nations pursue economic ties and political rapport with friendly nations of Southeast Asia, and provide assistance to the newly independent island nations of the Southwest Pacific. These actions aid in countering Soviet attempts to penetrate the area. In support of security in Southwest Asia, Australia contributes naval deployments and aviation patrols in the Indian Ocean. Both Australia and New Zealand are modernizing their armed forces by acquiring military equipment and training from the United States. The United States is continuing to center its security relationships in the Southwestern Pacific on ANZUS.

### Latin America

Central America, South America, and the Caribbean play a major role in US global security. The region is linked to Western Europe by SLOCs which support the reinforcement and resupply of NATO. It is linked to SWA by Caribbean oil refineries and the proximity of South Atlantic and Caribbean oil SLOCs, and to East Asia and the Pacific by the Panama Canal, which is important for inter-ocean transfer of shipping and military forces. As a source of strategic resources, particularly oil, and a growing basic industrial base, Latin America will assume increasing importance to the industrial world in the 1980s.

Perhaps more than in any other region, the forces of change are active in the Caribbean and Latin America. Regional instability affords the Soviet Union and its Cuban allies opportunities to exploit regional, social, political, and economic problems. Thus, the Soviet Union is financing an extensive Cuban force modernization and expansion program. US military policy complements a strategy which provides economic assistance and political support for moderate elements working for peaceful change.

Collective security and rejuvenated security assistance programs throughout Latin America are critical to our national strategy to improve hemispheric defensive capabilities and develop better cooperative relationships. The implementation of these programs, particularly with the participation of other industrialized nations, will upgrade regional capabilities, consolidate shared perceptions of the threat, and improve hemispheric cohesion.

### Africa

US strategy toward Africa has historically emphasized ideological, political, and economic goals, and minimized the need for mutual security ties with African countries. However, Africa is of increasing significance to the United States because of its strategic minerals and petroleum, its geographic location on or near vital strategic lines of communication, and its regional instability. For the most part, the US has looked to the European powers to lead in African security matters. The United States maintains limited military assistance programs in some areas of Africa.

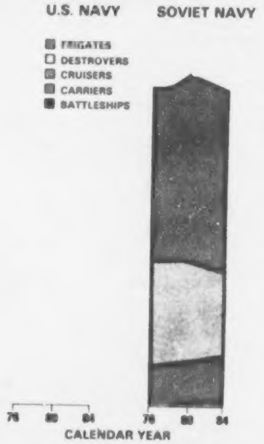
### The Maritime Balance

As a nation with global commitments, the United States must control vital sea areas and SLOCs to support its forward deployed forces and maintain, with its allies, a decisive maritime capability. Conversely, the Soviet Union is a continental power, largely independent of SLOCs. In the last two decades, the Soviet Navy has grown from an adjunct to its land forces, with a limited coastal mission, to an open-ocean navy, which is increasingly capable of interdicting vital US and allied SLOCs throughout the world.

While the Soviet Navy was undergoing unprecedented expansion, the US Navy was experiencing a decline in force levels as older and less capable ships and aircraft were removed from the inventory without replacement. Today, the US Navy is outnumbered by the Soviet Navy and is likely to remain so for the foreseeable future. A significant advantage for the United States, however, is that many allies also have capable naval forces to weigh in the balance. To summarize more specifically the total force shortfalls of the US Navy in a global context, the following discussion concentrates on the world's two major opposing navies.

The Soviet numerical advantage in naval forces 15 years ago was 1.5 to 1. For the most part, this ratio reflected the greater number of auxiliaries and minor combatants in the Soviet Navy, such as mine warfare ships and patrol combatants. At that time, the two navies had roughly equal numbers of warships, despite larger Soviet submarine forces. Now, however, the overall numerical advantage of the Soviet Navy is 3.5 to 1, including coastal vessels, and its advantage in warships is 2.5 to 1. The relative quantitative advantage of the Soviet Navy in numbers of principal surface combatants is indicated in Chart 2-8, which depicts inventory trends in these types of ships.

## PRINCIPAL SURFACE COMBATANTS



AS OF 1 JANUARY 1983 *CHART 2-8*

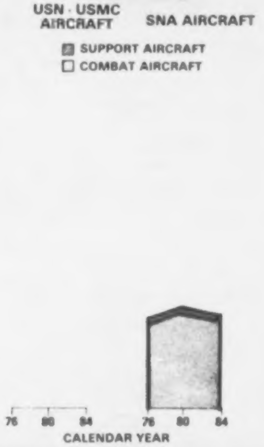
A significant part of Soviet naval strength lies in torpedo-attack and cruise missile submarines, with over 50 of the latter projected to remain deployed through the mid-1980s. The OSCAR-class submarine, which entered the fleet in 1981, is the world's largest cruise missile submarine and carries 24 submerged-launch, long-range antiship cruise missiles. The Soviets are also expected to develop a smaller cruise missile submarine to replace the aging ECHO II and JULIET-classes. New ALFA-class attack submarines (SSN), incorporating innovative, high-risk technology, have been launched. Soviet general-purpose submarines outnumber US submarines three to one, but the overall technological superiority of US attack submarines and the combined capability of US and allied ASW forces partially offset this numerical advantage.

SOVIET ALFA SUB

Soviet naval aviation will continue to improve its land-based strike force through acquisition of BACKFIRE and follow-on bombers, while concurrently developing and expanding carrier-borne, fixed-wing aviation. The BACKFIRE force is armed with AS-4 supersonic antiship cruise missiles.

A principal advantage of the US Navy over the USSR Navy remains its superiority in carrier-based air power. As indicated in Chart 2-9, the US Navy still holds a major advantage in total naval air power.

## U.S. AND SOVIET NAVAL AIRCRAFT TRENDS



AS OF 1 JANUARY 1983 *CHART 2-9*

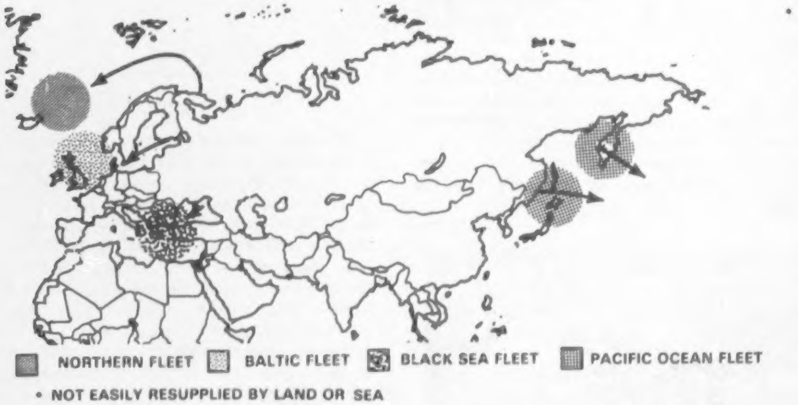
One of the most significant recent Soviet surface ship developments is the KIEV class carrier — the first Soviet-built ship to carry fixed wing aircraft. The Soviet Union also apparently intends to build a larger, full-length flight deck, conventional aircraft carrier. It will likely be nuclear-powered, displace about 60,000 tons, have catapults and arresting gear, and carry high-performance conventional take-off and landing aircraft. With a displacement of 28,000 tons, the nuclear-powered, guided missile cruiser KIROV is the largest combatant other than aircraft carriers built by any country since World War II. Another multipurpose guided missile cruiser, tentatively designated the BLK-COM-1, is under construction. Both cruisers represent a departure from the Soviet special-purpose cruiser designs of the 1960s and 1970s. Although extensive Soviet shipborne air defense capabilities increase the effectiveness of surface combatants when operating beyond the range of land-based fighter aircraft, the lack of adequate Soviet carrier-borne fighters will remain a weakness.

A CARRIER BATTLE GROUP UNDERWAY

The open-ocean effectiveness of Soviet naval forces is adversely affected by geographic constraints on their operations (see Map 2-2). The four Soviet fleets — Northern, Baltic, Black Sea, and Pacific — are widely separated and must either traverse considerable distances or transit through chokepoints to reach the open ocean. To enter the North Atlantic, the Northern Fleet (based along the Barents Sea) must transit more than 1,500 miles through waters bounded by potentially unfriendly nations. The Baltic Fleet has access to the oceans only through the narrow, easily mined Danish Straits dominated by Sweden, Denmark, Norway, and West Germany. The Black Sea Fleet can reach the Mediterranean Sea only by transiting the Turkish Straits, which are also narrow, easily mined, and controlled by Turkey. These constraints could be offset somewhat by pre-hostilities deployment, but this would provide significant strategic warning to the US and its allies.

The Soviet Pacific Fleet is concentrated at Vladivostok, on the Sea of Japan, and Petropavlovsk, in the northwest Pacific Ocean. Forces at Vladivostok have ready access to the Sea of Japan, but to reach the Pacific Ocean they must pass through straits close to Japan and South Korea — waters readily accessible to allied forces. Although the fleet at Petropavlovsk has easy access to the Pacific Ocean, Petropavlovsk is located on the Kamchatka Peninsula, which is remote from the Soviet heartland and not easily resupplied. Thus, the Soviet Navy would have difficulty in maintaining operations out of Petropavlovsk unless major sea lines of resupply could be sustained.

## GEOGRAPHIC CONSTRAINTS ON SOVIET NAVAL OPERATIONS



AS OF 1 JANUARY 1983

MAP 2-2

## US FORCES: A SUMMARY ASSESSMENT

Military capability — the ability to achieve a specified wartime objective, such as winning a war or a battle or destroying designated enemy forces — depends primarily on four key elements: force structure, modernization, readiness, and sustainability. The basic tools used for assessing military capability are situation reports submitted by the CINCs, the combat readiness portion of Unit Status and Identity Reports, Joint Chiefs of Staff (JCS) directed and coordinated exercise reports, and other unit evaluations. These reports are complementary and are reflected in the assessments which follow.

The overall capability of US conventional forces to achieve national military objectives has improved. Although shortfalls caused by years of inadequate funding continue to restrict warfighting capabilities, these deficiencies are gradually being reduced as a result of recent budget initiatives. Support for the programs contained in the FY 1984 Budget will sustain the positive trends in overall military capability.

### Force Structure

Additional combat units are required if the US is to successfully discharge its responsibilities worldwide. A strong, well-equipped, and properly sized military force, projected globally, with a politically demonstrated resolve to prevent war through deterrence, is the foundation for the preservation of peace.

While the need for increased combat force structure growth is evident, these forces cannot be employed without corresponding increases in mobility and support forces. At present, shortfalls in intratheater airlift, mobile logistics support forces, amphibious ships, combat support/combat service support units, and necessary logistics sustainment degrade the warfighting capabilities of the force. The combat force-support force-sustainment imbalance must be corrected and a balanced warfighting capability established and maintained as the force structure increases.

### Modernization

In keeping with current priorities to improve operational capabilities and readiness before significantly expanding force structure, important programs are in progress to modernize equipment in the existing force structure. Although modernization efforts have been underway for some time, these programs have not been able to halt the increasing average age of the force. The emphasis must remain on attaining maximum capability from the current force, while modernizing to maintain qualitative technological advantages over potential enemy forces.

### Readiness

Readiness trends have improved. The upward shift is a direct result of the FY 1981 Supplementary Budget and the FY 1982 Budget. Major reasons for the improvements include increased morale and retention rates and the infusion of modern equipment. The shortage of senior grade enlisted personnel is in the process of being corrected. Continued support in the above areas is required to maintain these positive trends. The most pressing readiness problems continue to center on personnel related matters and shortages of munitions, spare parts, and modern communications-electronics equipment. Although readiness has improved, training, an integral part of overall readiness, has not kept pace with that trend. Increased funding support for fuel, ammunition, and repair parts needed for ship steaming days, aircraft flying hours, and field training days is essential to reverse the trend in training and improve overall readiness. The proposed FY 1984 budget is crucial to reducing these shortfalls.

The CINC Readiness Fund is an innovation to enhance the readiness of the forces assigned to the unified and specified commands. The CINCs are responsible for the deployment and employment of US military forces assigned to their command. The CINCs, however, do not directly control or have funds immediately available to correct unanticipated readiness deficiencies or to take advantage of short notice readiness improvement opportunities. All funding is provided by the component Services (Army, Navy, Air Force, Marine Corps) assigned to the command. If the Services choose to fund a CINC's unanticipated readiness initiative, they must reprioritize their Service programs. This process can result in program disruption and a considerable time lapse before readiness improvements occur. The CINC Readiness Fund is a quick reaction source of funds to meet unanticipated readiness expenses. Items financed must be urgent, one-time, unbudgeted, operating requirements identified by the CINCs. Emphasis is on relatively low cost, fast payoff projects which must be directly related to increased readiness and warfighting effectiveness. All fund expenditures will be based on individual requests from the CINCs. The Chairman, Joint Chiefs of Staff will approve each request.

Joint and combined training exercises are a valuable means of assessing the capabilities and increasing the readiness of US forces. During FY 1984, 58 JCS directed and coordinated exercises are programmed. Forces of all Military Services will participate in these exercises, which are designed to deploy forces to the Far East, Europe, Latin America, and the Middle East; operate in desert and other extreme environments; exercise command and control of multi-Service task forces; and link reinforcing units with deployed or prepositioned equipment. In addition, these exercises are used to evaluate US strategic plans and to show US presence throughout the world. Joint and combined training exercises will continue to play a vital role in sharpening the readiness posture of US forces and that of its allies.

### Sustainability

The "staying power" of US forces is essential to combat capability. Materiel sustainability consists of several interdependent elements, including material pre-positioning programs abroad, CONUS depot stocks, host nation support, mobility, and the industrial production base. Service programming efforts in response to midterm objectives contained in the current defense program have produced a positive trend in sustainability. Service shortfalls remain in the areas of mobility, medical support, petroleum, oils, and lubricants storage, munitions stockage and storage, and equipment and aircraft spare parts stockage. Continued support for proposed sustainability measures is essential in the long-term effort to achieve the posture required for success in a sustained global conflict. Of equal importance is balanced investment to achieve the most efficient mix of war reserve materiel stockpiles and industrial production surge capacity. The following sustainability programs require emphasis:

#### *Ammunition*

Service ammunition programs continue to build stocks to meet program goals. Although this progress is encouraging, production of modern, precision-guided munitions is constrained by high costs and long production lead times. Further, additional pre-positioned ammunition stockpiles will be needed to continue warfighting at anticipated intensities until resupply pipelines are established.

#### *Petroleum, Oils, and Lubricants (POL)*

The Defense Logistics Agency (DLA) has increased petroleum inventories by approximately 7.8 million barrels, a 9.6 percent increase over last year's inventory objective. The DLA budget provides for continued improvement in this inventory. NATO infrastructure funding for POL projects and storage facilities is crucial. The US and its NATO allies agree that specified FY 1984-1988 Military Construction (MILCON) projects are needed to rectify the shortfalls. In addition, improvements are required for Army POL distribution handling equipment.

#### *Host Nation Support (HNS)*

Manpower and budget restrictions have severely limited the ability of the US to provide adequate support for its deployed forces in time of war. HNS arrangements are an important initiative aimed at overcoming force sustainment deficiencies. During the past year, progress has been achieved in providing wartime HNS for US forces. A notable example is the Wartime Host Nation Support Agreement signed with the FRG on 15 April 1982. This agreement provides support from the civilian sector, such as transportation, communications, maintenance, facilities, supplies, and labor. The FRG has agreed to provide approximately 93,000 mobilized reservists to support US forces in various tasks: facility security, airfield damage repair, collocated operating base support, resupply, casualty evacuation, prisoner of war handling, and decontamination. During peacetime, the FRG will maintain a cadre, headquarters structure, and planning capability to assist in rapid mobilization. The FRG has agreed to pay the personnel expenses of the reserve units, and the US will pay for the equipment. Program costs will be shared equally by each country. In the UK, Belgium, the Netherlands, and Luxembourg, HNS negotiations continue. Wartime requirements have been refined and provided to the host nations by USEUCOM. A US "Statement of Principle," indicating the intent of each country to provide increased HNS, was signed in October 1981 by Belgium, Luxembourg, and the United Kingdom, and by the Netherlands in August 1982. In the Pacific, HNS has existed in Korea for many years. Key logistical projects include POL and ammunition support, highway transportation, the Korean Service Corps, shipping and airlift support, overhaul of US equipment, construction of dependent housing for lease, and terminal service support. Japanese HNS consists of the Relocation Construction Program which provides base housing rentals and construction cost assistance. The Japanese Facilities Improvement Program is the primary source of new facility construction, significantly reducing the cost to the US of stationing US forces in Japan.

#### *Southwest Asia Pre-positioning*

To ensure that the United States can establish and sustain operations in SWA, pre-positioning objectives have been established to support deploying forces until sea and air lines of communication are securely established and regular resupply operations commence. Although a substantial amount of defense materiel has been pre-positioned on the NTPF ships at Diego Garcia, significantly more is required.

### *Medical*

Medical support for US forces in combat is inadequate. The shortfall of hospital beds stems from an insufficient number of equipped, deployable hospitals. The FY 1983 program will provide an additional 11,600 deployable beds (9,600 ashore; 2,000 afloat in hospital ships). Because of procurement leadtimes, however, the increased ashore and afloat capability will not be realized until FY 1985 and 1986, respectively. The FY 1984 program will provide another 13,200 beds ashore. Continued funding of medical programs is essential.

### *Military Construction*

Within NATO, an acute problem is developing as the result of several years of inadequate infrastructure funding. When construction projects are vital to the United States, but the infrastructure program is unable to accommodate them in a timely manner, prefinancing through US MILCON is in the best interests of the United States. A comprehensive MILCON program to support deployment of forces to SWA has been developed. This program, when completed, will provide the basic infrastructure capable of supporting USCENTCOM. Major MILCON is required in the Pacific to alleviate deficiencies in POL storage facilities. A combination of US MILCON and host-nation funded construction projects will improve POL distribution as new storage facilities are completed within the next two years in Hawaii, Guam, Wake Island, Korea, and Japan.

### *Backlog of Maintenance and Repair (BMAR)*

The rising trend of unfunded BMAR for military facilities was reversed in FY 1982. However, aging facilities, increased utilization of these facilities, the need for expanded physical plants to accommodate changed missions, and modernization of forces will cause annual operations and maintenance costs to rise, putting renewed pressure on the Services' ability to comply with Congressional funding limits on BMAR. Additionally, past underfunding of BMAR has hastened new construction requirements for replacement of deteriorated facilities.

## Mobility Resources

Successful response to global contingencies depends upon sufficient mobility assets to project combat forces rapidly and sustain them in the theater as long as necessary to meet US objectives. In general, airlift will transport deploying forces during the early days of a crisis until sealift begins to arrive. These movements will include personnel and equipment to use pre-positioned stock. As the crisis progresses, sealift will provide the vital sustaining power for deployed forces, and will ultimately account for 90-95 percent of the total cargo delivered over an extended period.

### Airlift

The ability to rapidly deliver forces and materiel to a theater during the early days of deployment is crucial to US strategy. Intertheater and intratheater airlift aircraft must deliver combat forces from CONUS garrisons through theater ports of debarkation to combat operating locations, and sustain forces in the field by delivering time sensitive critical supplies. The Air Force is enhancing current mobility capabilities by: (1) providing for a higher utilization rate of aircraft, (2) increasing in-theater organic airlift, and (3) improving the Civil Reserve Air Fleet. Serious deficiencies remain, particularly in intertheater and intratheater cargo carrying capacity.

To overcome the inherent limitations of airlift and sealift, programs for pre-positioning petroleum, water, supplies, and ammunition are in progress in various regions of the world. Ashore and afloat pre-positioning reduces immediate cargo deployment requirements by permitting necessary materials to be placed in areas vital to US national security. Under the POMCUS program, the most prominent ongoing effort, equipment has been pre-positioned in Europe for three Army divisions and numerous nondivisional support units, and a fourth set is being purchased.

### Sealift

Sealift will bear the brunt of the workload in deployment, reinforcement, and resupply efforts. In any major overseas deployment, sealift will deliver about 95 percent of all the dry cargo and more than 90 percent of all petroleum products. POL shipments will outweigh all other types of cargo combined.

Ships from the US Merchant Marine represent the single largest domestic source of this sealift. The US relys on the nation's merchant marine as a strategic resource. For the reinforcement of NATO and Korea, sealift resources will be augmented by the allies.

The UK experience in the South Atlantic campaign vividly illustrates the importance of a nation's merchant marine in the projection of power. Faced with fighting

8,000 miles from home, the UK chartered or requisitioned a total of 58 merchant ships to support combat operations in the South Atlantic. Three out of every four ships in the British task force were merchant ships manned by civilians. UK merchant ships supplied the required sustainability.

At the same time as the US military is putting increased emphasis on the role of sealift in strategic mobility, US sealift assets continue to decline. Over the last 30 years, the number of militarily useful dry-cargo ships available from the US merchant marine, the National Defense Reserve Fleet (NDRF), the Ready Reserve Force (RRF), and the Military Sealift Command's (MSC) peacetime Controlled Fleet has declined from 2,400 to about 440. Not only are the overall numbers of US dry-cargo ships that are militarily useful declining, but those that remain are less versatile. The industry trend toward containerships and away from breakbulk ships poses increasing readiness problems, particularly in terms of initial deployment requirements.

The self-sustaining, breakbulk, dry-cargo ship remains one of the most useful types for force deployment. However, as the more profitable containership comes to dominate the commercial, dry-cargo sector, there is little commercial demand for the breakbulk ship. Of the 104 militarily useful breakbulk ships flying the US flag today, more than a third are laid up or lying idle. Unfortunately, the containership is not the best choice for strategic mobility. The most useful ships for a military deployment are breakbulk, roll-on/roll-off, and barge carrying ships, but only a modest number of the latter two types are in the fleet today. Moreover, no significant increases are anticipated.

Containerships also have limited utility in less-developed countries where modern container handling facilities to unload the ships are not available. More importantly, the bulk of military unit equipment does not lend itself to containerization — less than 25 percent and as little as eight percent for certain units. These ships thus have limited utility for rapid deployment of unit equipment. Containerships can, however, be extremely valuable in resupply efforts.

The increasing use of containers during peacetime has reduced the number of dry-cargo ships in the MSC Controlled Fleet from 25 to 16 in the past fiscal year. Unfortunately, reduction of these common-user, dry-cargo ships also means a reduction in MSC surge ability.

There is also a significant shortage of sealift to deliver the fuel necessary to sustain a deployment of US forces. Militarily useful petroleum tankers in the US flag merchant fleet number 143. Most of these tankers are involved in US coastal trade. For major overseas deployments, the US would be heavily dependent on foreign flag tankers with foreign crews. If the use of pipelines and barges for peacetime movements of petroleum continues to increase, the number of US flag militarily useful tankers in commercial trade will decrease by an additional 4 or 5 "Handy Size" tanker equivalents ("Handy Size" tanker equivalents carry 220,000 barrels of POL).

Ships laid up in the National Defense Reserve Fleet (NDRF) are a valuable but aging asset. Some 179 sealift ships are in the NDRF, and most are World War II VICTORY ships approaching 40 years of age. The workforce to man these ships also is aging. The average age of US merchant seamen is 53 years.

The Ready Reserve Fleet (RRF), an upgraded segment of the NDRF, is a more useful asset. Twenty-nine newer ships are held in advanced readiness and are ready to load in 10 days or less.

The cost of operating ships under the American flag has driven many ship owners to register ships under foreign flags ("flags of convenience") and to crew them with foreign nationals. Although these ships should be available in the event of war or crisis, the reliability of foreign crews is uncertain. Foreign registry is a major detraction from the maintenance of a viable US merchant marine.

To obtain maximum benefit from sealift assets, US forces must be able to unload and distribute cargo from ships rapidly as they arrive in the theater of operations. In the central European theater, adequate host nation support for the reception of deploying US forces is available, and there are numerous modern ports located near road and rail networks. Seaports in northern and southern Europe, however, lack the capacity found in the seaports of the central European region.

In Southwest Asia, limited host nation support can be expected, and there is significantly less cargo unloading capability than required for the reception of deploying US forces. It is therefore necessary to plan to unload ships in austere ports and over the shore.

### Command, Control, and Communications

Command, control, and communications ($C^3$) are integral to the effective employment of military forces. Recent programs have improved wartime $C^3$ systems survivability, and have expanded the role of the unified and specified commands in $C^3$ planning and programming. In combination with superior US technology, improved coordination of $C^3$ programs among the Military Services is creating a better balance between limited US resources and priority requirements.

The National Military Command System (NMCS) is the $C^3$ element that provides the National Command Authorities (NCA) the capability to command strategic forces during national crises. The system must first of all communicate warning of an attack and thereafter provide for timely transmission of decisions.

Tactical warning sensors and communications systems of the NMCS provide the means for detecting and forwarding attack information to command authorities. Although the overall capability of the Tactical Warning and Attack Assessment system is improving, many subsystems used for warning and attack assessment are vulnerable to high altitude nuclear burst effects. In the event of a Soviet SLBM attack, these systems could be disrupted or damaged by warhead detonations.

Command centers and connecting communications systems provide the information for decisionmaking and disseminating directives to operational forces. The Minimum Essential Emergency Communications Network (MEECN) is the group of systems designated to assure delivery of urgent directions to forces in a nuclear war.

The Worldwide Airborne Command Post system is the backbone of the MEECN. Improving the survivability of this airborne system, along with development of a new emergency communications network and a new communication satellite system (MILSTAR), will substantially increase communications reliability during nuclear attacks.

Following an initial attack, $C^3$ systems must continue to support the NCA throughout the remainder of the conflict. Management of strategic forces requires the survival of the NCA during and after a nuclear attack and the guaranteed survival of an element of the NMCS. The National Emergency Airborne Command Post (NEACP) is the most survivable element of the NMCS. As long as logistics and refueling support is available, the E-4B aircraft possesses inherent ground and airborne capabilities to support enduring force management, but the magnitude of the requirements posed by a continuing nuclear conflict exceeds current NEACP capabilities. To overcome this shortfall, a Mobile Command Center is being developed to provide increased assurance that force management functions can continue. Many equipment shortfalls remain to be solved before national $C^3$ systems will have the endurance, flexibility, and survivability to support the NCA on a sustained basis through a nuclear war.

Although tactical $C^3$ systems readiness is improving, fielded $C^3$ systems lack necessary redundancy and hardening. Modernization initiatives are beginning to yield results, and continued emphasis to improve tactical $C^3$ systems is necessary. Improvements are needed to replace aging equipment and to counter the enemy's anticipated electronic deception and jamming threat. Inter-Service interoperability problems continue among the many types of Service-procured communications equipment and cryptographic devices. As a primary example, the $C^3$ systems interface of US forces headquarters and echelons above corps level requires improvement and modernization.

To support US command and control global operations, in peace or war, the Defense Communications System (DCS) provides a variety of long-distance services through composite networks of US owned and commercially leased facilities. To function adequately in combat, there are options to enhance, modernize, and improve the system's survivability and its interoperability with NATO. The fixed facility and satellite systems of the DCS are, however, vulnerable to sabotage and attack. Ongoing improvement programs will enhance survivability of these elements through increased redundancy and mobile restoration assets. The gradual worldwide conversion from analog to digital transmission systems will improve reliability, transmission quality, and security. The unifying theme common to the DCS subsystems of the future will be expanded service in voice, printed data, and secure conferencing to provide enhanced survivability, improved interoperability, greater flexibility, and increased performance.

# SECTION 3: PATH TO THE FUTURE

## INTRODUCTION

The preceding sections surveyed the military challenges facing the United States, outlined the global strategy and forces needed to meet the challenges, and assessed the status of major US military forces. This final section summarizes Department of Defense programs required to maintain, improve, or expand the forces needed to support US military strategy.

Over the past few years, steady progress has been made in building more effective US fighting forces. This progress must continue in order to serve notice that the United States intends to meet its security challenges. The progress made in building the US Armed Forces is beginning to reverse the downward trend of the late 1970s in relation to the Soviet military buildup. The programs described below will continue that crucial momentum.

## FORCE STRUCTURE

Despite the force improvements gained over the past two years, a measured and balanced expansion of selected US forces is needed to meet the global challenge. As previously noted, US military strategy does not call for matching the massive size of the Soviet force, but instead emphasizes refining our qualitative edge in conjunction with moderate force increases. Within these guidelines, the Navy will expand to a 600-ship force by the late 1980s. Near-term emphasis within the Air Force will be placed on creating more squadrons of airlift aircraft and new tactical fighters. The Army will activate new combat support units and organize two more National Guard divisions from existing units. Other elements of force structure, such as personnel and organizational initiatives, Reserve Components, mobilization plans and the industrial support base, are discussed below.

### Personnel and Organizational Initiatives

The cornerstone of any effective military organization is the quality of the personnel in the force. Due to underfunded defense budgets in the 1970s, there was a serious decline not only in the quality and numbers of recruits but also in retention of required numbers of mid-career enlisted leaders and technicians. Increases in pay and benefits, among other initiatives in FY 1981 and FY 1982, permitted the Military Services to achieve the manpower strengths authorized by Congress. The morale and esprit of the All Volunteer Force projected professionalism needed for continued recruitment and retention. The additional high-caliber recruits and quality leaders and technicians contributed to quantum improvements in the amount and quality of training. The improved training has caused steady improvement in readiness — proof of the value of pay and benefits programs. These achievements, however, were accomplished in an economy with current high unemployment. The gains may prove to be transitory unless compensation-related recruitment and retention programs continue to receive careful scrutiny over the long term. Sophisticated weaponry will be of little value without properly trained and motivated personnel to operate and maintain it. Comments concerning compensation and other people-oriented programs are contained in the appendix under "Manning the Force."

In conjunction with personnel initiatives, the Military Services are also exploring organizational changes to improve individual unit effectiveness. For example, the Army is undertaking a program entitled "Army 90" to implement its published AirLand Battle doctrine. The unifying concept of the doctrine is the defeat of numerically superior forces in a nuclear, chemical, or conventional weapons environment. This concept has been developed to synchronize the close-in battle against enemy lead forces with a longer-range battle against enemy follow-on forces. Army light and heavy divisions are being rearmed and restructured for sustained, continuous combat operations at any level of conflict. The Army is seeking to increase the firepower and survivability of its light divisions, thus gaining greater strategic mobility and combat effectiveness.

The Master Restationing Plan (MRP) for Europe encompasses the planning and construction to support relocation of three of the Army's fifteen maneuver brigades in that theater. These units will be stationed closer to the eastern border of the Federal Republic of Germany (FRG). The restationing will strengthen forward conventional defenses, provide facilities needed for new weapon systems, and improve living and working conditions for the soldiers and their families. In the FY 1982 and FY 1983 budget decisions, Congress conditioned funding for MRP upon an agreement by the FRG to share the costs. Negotiations with FRG officials began in March 1982. The US is seeking a satisfactory cost-sharing agreement which could take effect in FY 1985. Consequently, no funds for this program are included in the FY 1984 budget request.

The Marine Corps is restructuring its infantry battalions to increase firepower and tactical mobility. Although the realignment of various weapons teams has resulted in a 10 percent personnel reduction, the introduction of more advanced weapons will improve warfighting ability. A newer version of the M-16 rifle, the .50 caliber heavy machine gun, the 60mm light-weight mortar, and a new 40mm heavy machine gun will provide increased firepower against personnel and light armored vehicles at ranges out to 2,200 meters. A 25 percent increase in DRAGON antitank missile teams in each battalion and an additional TOW antitank missile platoon in each regiment will improve antiarmor capabilities. New Light Armored Vehicle (LAV) battalions and the addition of a 155mm self-propelled artillery battery in each division will enhance Marine Corps mobility and long-range firepower.

DRAGON ANTIARMOR MISSILE

**Reserve Components and Mobilization Planning**

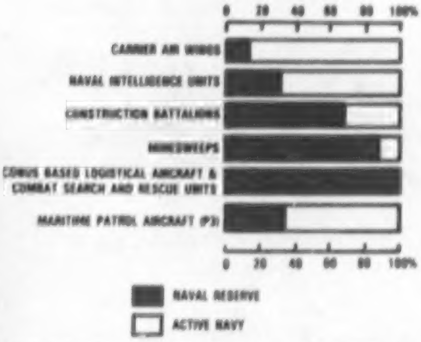
In the initial phase of a major conventional conflict, US Active Component forces could operate successfully for only short time without mobilization of selected Reserve units and individuals. In any extended conflict, additional war material produced by US industries would also be essential. Accordingly, the ability to rapidly mobilize manpower, equipment, and industrial capacity is a key element of deterrence and a prerequisite for successfully waging war.

Reserve Components in the Total Force

Reserve Components play an important part in force structure planning. Reservists constitute approximately 45 percent of the total force structure. Charts 3-1 through 3-4 illustrate the major National Guard and Reserve contributions to the US total force.

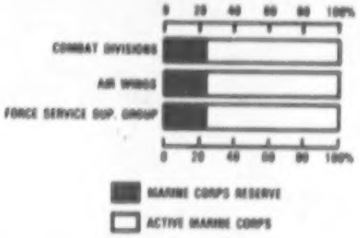
Reserve Components also make major contributions to the operations of their parent Military Service in peacetime. One-half of the nation's strategic airlift aircrews, one-third of the Military Airlift Command's aeromedical evacuation aircrews, and two-thirds of the air defense interceptor capability for the continental United States are Air Reserve forces. The Marine Corps Reserve supports the active force by participating in ground and air exercises. Nearly three-fourths of the Army's medical personnel are assigned to the Army Reserve. Other contributions are made in military intelligence, legal services, and military exercise planning.

## COMPARISON OF NAVAL RESERVE COMPONENTS TO TOTAL NAVAL FORCES



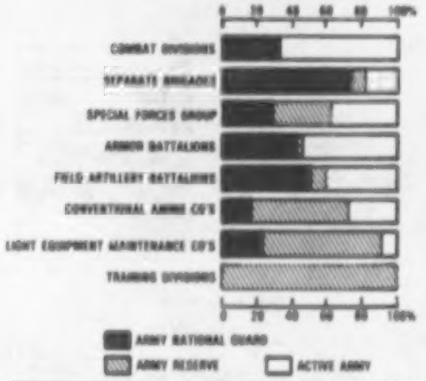
AS OF 1 JANUARY 1983 *CHART 3-1*

## COMPARISON OF MARINE CORPS RESERVE COMPONENTS TO TOTAL MARINE CORPS FORCES



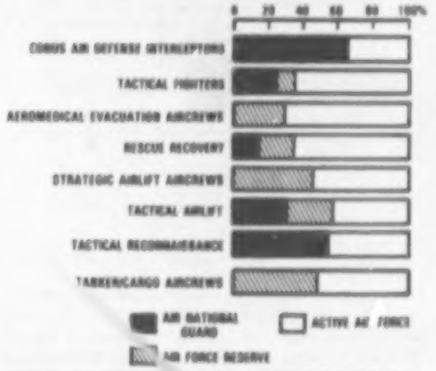
AS OF 1 JANUARY 1983 *CHART 3-2*

## COMPARISON OF ARMY RESERVE COMPONENTS TO TOTAL ARMY FORCES



AS OF 1 JANUARY 1983 *CHART 3-3*

## COMPARISON OF AIR RESERVE FORCE COMPONENTS TO TOTAL AIR FORCE



AS OF 1 JANUARY 1983 *CHART 3-4*

The Naval Reserve provides all the Navy's logistical airlift in CONUS, produces over one-third of naval intelligence, and participates regularly in the maritime patrol mission.

### Mobilization Planning and Exercises

A comprehensive national mobilization policy is required to ensure that the US can respond to the threat of war or other emergencies. Successful mobilization depends on mutually supporting actions between local, state, and national governments and civilian industries to insure the availability of resources and support that DOD cannot provide. To resolve mobilization problems, the President established the Emergency Mobilization Preparedness Board and published the National Policy Statement on Emergency Mobilization Preparedness. This statement and the associated Plan of Action illustrate the interdependence of military capability and national mobilization to meet defense and essential civilian needs during national security emergencies.

Military mobilization planning focuses on the process by which the Armed Forces are made ready for war and supported after hostilities begin. This includes the assembling and organizing of personnel, supplies, and material for military use and the marshalling of national industry. By integrating Service mobilization planning with combat contingency planning and testing both with JCS-directed exercises, resource shortfalls and other impediments to mobilization are being identified and corrected.

The recently completed JCS Exercise PROUD SABER 83 highlighted three areas of major concern regarding national mobilization. The first is the inadequacy of the national industrial base to meet the immediate needs of the Armed Forces and sustain these forces in a prolonged engagement. The second is the need to improve the mobilization planning interface between DOD and other Federal Departments and Agencies, and between the Federal Government and the civil sector, particularly industry. The third involves the inadequacy of laws governing mobilization. Major DOD industrial mobilization initiatives are underway to evaluate mobilization shortages and recommend improvements. The principal areas of emphasis are discussed below.

### Meeting Personnel Requirements for Mobilization

The ability of the United States to provide skilled and trained personnel to satisfy military manning requirements during mobilization warrants continuing attention. Considerable progress has been made, particularly through development of procedures to recall retired personnel and plans to increase the strength of selected Reserve units. However, the President needs authority to extend terms of service in all components of the Military Services in order to be able to respond to a contingency or national emergency. This requirement, termed "stop-loss," is particularly advantageous because it precludes the loss of trained people at the very time they are needed. Statutory "stop-loss" procedures for the various components (Regular, Reserve, and National Guard) are inconsistent. For example, it is possible that reservists could be recalled from civilian life to respond to an emergency at the same time that other personnel completing active military service are released. Presidential action can preclude some losses, but a Congressional declaration of war or national emergency is necessary to extend terms of service for some personnel. Uniform legislation is needed to provide the President the necessary authority to effect "stop-loss" actions in a timely manner.

#### Industrial Responsiveness

The US industrial base requires strengthening to produce military equipment more economically in peacetime and to surge production to meet wartime demands. This situation results primarily from limited weapon system assembly facilities, long leadtimes for production of critical subassemblies, and the inability of subvendors to meet growing production requirements. The critical skills, raw materials, machine tools, production equipment, and transportation assets needed to provide a responsive production increase must be available if wartime needs are to be met. A carefully managed program of industrial equipment and facility modernization, stockpiling of critical minerals, incentives to industry, and industry/government joint contractual agreements to support the needs of mobilization is required to redress the shortfalls. Since US industries alone are unable to meet the challenge, arrangements to use the production capabilities of allied nations must be made. US industry must also receive government assistance in developing measures for protection during enemy attack, for reconstitution following attack, and for guarding against acts of sabotage and terrorism.

## MODERNIZATION

### Strategic Nuclear Forces

#### Offensive Forces

In 1981, the US acted to restore the nuclear deterrent through modernization of its strategic posture. The five main elements of this modernization program will strengthen each leg of the offensive TRIAD — ICBM, SLBM, and bombers — strategic defenses, and strategic $C^3$ connectivity.

#### *ICBM Modernization*

The latest guidance, propulsion, and warhead technologies will be incorporated in the PEACEKEEPER missile to improve accuracy and effectiveness against all categories of Soviet targets. The missile will carry 10 MIRVs, as compared with 3 on the MINUTEMAN III, and will be capable of rapid retargeting from its missile control centers. These improvements capitalize on advanced US technology and contribute to offsetting existing Soviet advantages in missile throw-weight and hardened missile silos and facilities for government leaders. In addition, the PEACEKEEPER system will retain all current ICBM advantages — high alert rate, low operating costs, and flexible targeting response. Pending Congressional approval of a basing mode recommendation, deployment of 100 PEACEKEEPER ICBMs is planned with the first increment available in 1986. To provide a counter to Soviet hardening programs, installation of improved warheads on 300 MINUTEMAN III missiles has just been completed.

#### *Sea-based Launch Systems*

The TRIDENT II (D-5) missile, more accurate and larger than the TRIDENT I (C-4), will be deployed before 1990. As the cornerstone of the modernization program for US sea-based strategic forces, this new missile will be capable of destroying hard targets, thereby improving Submarine-Launched Ballistic Missile (SLBM) effectiveness against the entire range of Soviet targets. The D-5 missile has a significant increase in payload, can carry larger warheads than the C-4 missile, and will cover the entire Warsaw Pact area from TRIDENT's normal patrol areas. The first OHIO-class TRIDENT submarine was delivered in October 1981 and deployed with C-4 missiles in October 1982. The TRIDENT submarine has more (24 vice 16) and larger missile launch tubes than earlier SSBNs. It also has greater maximum speed and is significantly quieter. Its shorter refit and overhaul times will allow more "on patrol" time over the system's lifetime than previous SSBNs. The current strategic pro-

USS OHIO (SSBN 726)

gram will fund TRIDENT SSBNs through FY 1988 at the rate of one per year. This provides a procurement schedule that is predictable, stable, and economical.

*Strategic Bombers/ALCM*

The B-1 bomber will redress many of the shortcomings of the obsolescent B-52. It can serve as a penetrating strategic bomber, a cruise missile standoff launch platform, and a conventional weapons bomber. Although smaller than the B-52, the B-1 carries a greater payload and reflects a radar signature 1/100th of that displayed by a B-52. The combination of flexible ECM, low-altitude attack tactics, high penetration speed, and small radar signature will ensure B-1 penetration capability well into the 1990s. It will also be hardened against nuclear electromagnetic effects to enhance survivability. The first of 100 B-1 bombers is scheduled for delivery by 1985.

An aggressive research and development effort is in progress to introduce "stealth" technology in an Advanced Technology Bomber (ATB) by the 1990s. With ATB deployed in significant numbers, the B-1 will continue selected penetration missions and assume a greater portion of the conventional weapons bombing missions. The B-1/ATB programs will give the US the mission flexibility and the weapons delivery effectiveness of the manned bomber into the next century.

The aging B-52s will be increasingly less able to penetrate enemy air defenses and are becoming more difficult and expensive to maintain. Pending replacement by the B-1, the B-52 force will be supplemented by Air-Launched Cruise Missiles (ALCMs) which became operational in 1982. Approximately 3,000 ALCMs will eventually be procured, with at least 1,000 expected in the field by the end of FY 1984. The extremely accurate ALCMs will be able to destroy the hardest Soviet targets. The ALCM's 2,500 km range enhances targeting and routing flexibility and reduces bomber exposure to current and projected Soviet air defense systems. Heavy conventional bombardment capability is being maintained by modifying 61 B-52Gs to carry external conventional weapons in addition to their internal payload. This modification will be completed by late 1983.

Strategic Defense

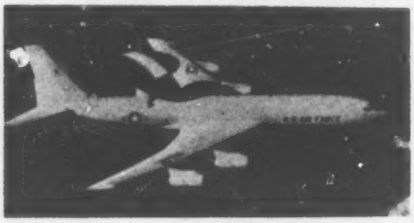
The most critical challenge to US defense systems is a ballistic missile attack. An effective warning system must be able to detect, identify, and track enemy weapon systems before and during an attack. To increase warning confidence and to minimize the likelihood of false alarms and possible overreaction, effective missile warning requires the sensing of an attack by at least two different methods. US ground and space-based systems provide dual source confirmation of the launch of an attacking missile. The ground-based PAVE PAWS and Ballistic Missile Early Warning radars operate in conjunction with space-based sensors. These systems cover most enemy SLBM and all ICBM launch areas. The activation of the two southern PAVE PAWS sites will complete the radar coverage of likely SLBM approach routes. The Advanced Warning System (AWS) is planned for the 1990s and will eventually replace current satellites.

**PAVE PAWS PHASED-ARRAY RADAR**

The Ballistic Missile Defense (BMD) program is exploring system concepts and conducting research and development (R&D) necessary to field a defense for US ICBM launch sites and other strategic assets such as SAC bases, $C^3$ facilities, and the NCA. Such a system could be available by the early 1990s. Although BMD systems are restricted by the 1972 US-Soviet Anti-Ballistic Missile Treaty and its 1974 Protocol, R&D work is permitted. The treaty prohibits each nation from having more than one BMD site, which may protect either the national capital or an ICBM field. It also places restrictions on the number of ABM components (interceptor missiles, launchers, and radars) deployed within that site.

Since deployment of a BMD system might be needed to assure the survivability of the ICBM force in the 1990s, the R&D program will maintain a baseline production option to take advantage of present technologies. Advanced technology efforts for future systems also include research on high-energy lasers, data processors, and advanced missiles and sensors.

Corrective air defense measures against bombers and cruise missiles include deploying Over-the-Horizon Backscatter (OTH-B) radars, which provide surveillance coverage of attack routes as far out as 1,800 miles, and improved microwave radars. Peacetime surveillance of continental airspace will be strengthened by the integration of specific civilian and military radar sites under the control of the Regional Operational Control Centers which comprise the Joint Surveillance System. This system should be operational by the mid-1980s, and will provide regional air defense command and control during an attack. Random Airborne Warning and Control System (AWACS) patrols will provide a supplementary deterrent until Distant Early Warning (DEW) Line radars are improved and OTH-B radars are deployed. The improved DEW line in the north, astride the most direct Soviet bomber approach route, together with OTH-B radars searching to the east, west, and south, will provide a perimeter surveillance capability for tactical warning at ranges which will allow increased response time against aircraft carrying cruise missiles and against the missiles themselves once launched.



E-3A AWACS

The AWACS aircraft provides a survivable surveillance capability and can control and direct fighters to targets at extended ranges — even if fixed ground radars and control facilities are destroyed. Additional AWACS will be added to the inventory during the 1980s to improve both tactical warning and air defense capabilities. With regard to interceptor modernization, F-15s are programmed to replace active F-106 air defense fighters. F-15 fighters have the flight range, radar search volume, and look-down/ shoot-down missile system to reach, identify, and engage airborne intruders at extended ranges where, for example, cruise missiles might be launched from their delivery aircraft.

Soviet space systems threaten both theater and strategic forces since their surveillance satellites continually gather intelligence on worldwide US military activities. The US has no counterpart to the Soviet antisatellite (ASAT) interceptor which can threaten US surveillance satellites at low altitudes. In the mid-to-late 1980s, a US ASAT will be operational. It will consist of miniature vehicles launched from F-15 interceptors. The ASAT system will confront the Soviet Union with both a deterrent and a system capable of retaliating against its satellites.

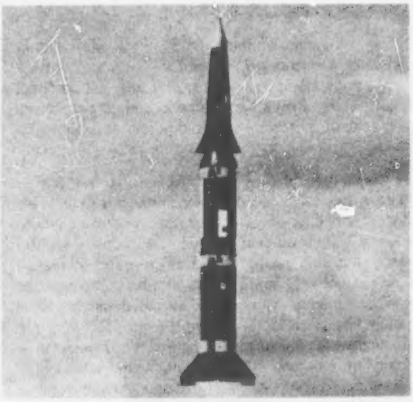
### Strategic $C^3$ Connectivity

During a nuclear conflict, $C^3$ systems will be subjected to power outages, deception, jamming, nuclear effects, atmospheric disruptions, and physical damage. US ability to retaliate after an attack, control escalation, and reconstitute forces will hinge on survivable $C^3$ systems.

Although there are no quick fixes for these vulnerabilities, it is possible to upgrade installations to assure a higher probability of effectiveness in a nuclear exchange. $C^3$ improvements have the highest priority within the strategic modernization program. Increased attention is being given to improving the timeliness and accuracy of tactical warning and attack assessment and enhancing communications between the NCA and the strategic forces. These measures include development of a proliferated ground wave radio system with multiple overlapping stations, enhanced satellite communications, and hardening of strategic bombers and $C^3$ relay aircraft to resist the EMP effects of nuclear detonations. The MILSTAR satellite program will provide reliable, EMP-hardened communications for all strategic forces. In addition, the extremely low frequency (ELF) communications relay system, which will be operational in FY 1985, will allow SSBN and SSN submarines to maintain communications while operating at greater depths and increased speeds. This improved system will reduce the submarines' risk of detection despite the improved ability of the USSR to monitor US submarine operations. Consequently, operational flexibility and survivability will be enchanced. The EC-130 TACAMO communications relay aircraft will be continously airborne in the Pacific by mid-1983 and on station to provide continuous downlink communications to all TRIDENT submarine patrol areas by the late 1980s. To continue this and other missions into the future, ECX, a follow-on aircraft to the EC-130s, is being developed. ECXs could perform the entire two-ocean TACAMO mission by the late 1980s. This aircraft will have more on-station time, be fully EMP-hardened, have a threat warning system installed, and have the flight range to use more widely dispersed airfields. Communications links between MINUTEMAN ICBM launch-control centers and the NCA are also being upgraded.

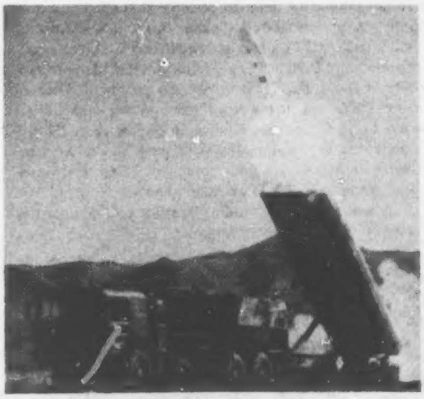
### Nonstrategic Nuclear Forces (NSNF)

In 1979, the decision was made to counter Soviet SS-20 missile deployment by modernizing NATO longer-range (1,800-5,500 km) weapons through deployment of 572 missiles in five European countries. One hundred and eight PERSHING II missiles will replace US PERSHING I-A missiles in the FRG. Four hundred and sixty-



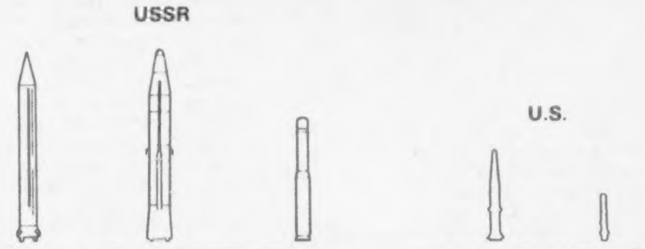
PERSHING II MISSILE

four TOMAHAWK ground-launched cruise missiles (GLCM) will be deployed in the Netherlands, FRG, Italy, Belgium, and the UK. Chart 3-5 compares PERSHING II and GLCM with Soviet longer-range INF missiles. When the PERSHING and GLCM deployment is complete, NATO will remain at a quantitative disadvantage in missile warheads.



GROUND-LAUNCHED CRUISE MISSILE (GLCM)

## LONG—RANGE INF (LRINF) MISSILES



| | SS - 4 | SS - 5 | SS - 20 | PERSHING II | GLCM |
|---|---|---|---|---|---|
| WARHEADS | 1 | 1 | 3 MIRV | 1 | 1 |
| RANGE (KM) | 2,000 | 4,100 | 5,000 | 1,800 | 2,500 |
| OPERATIONAL FLIGHT TIME | MINUTES | MINUTES | MINUTES | MINUTES | HOURS |
| OPERATIONAL MODE | FIXED | FIXED | MOBILE | MOBILE | MOBILE |
| GLOBAL NUMBERS DEPLOYED | 232 | 16 | 333 | 0 | 0 |
| YEAR OPERATIONAL | 1959 | 1961 | 1977 | 1983 | 1983 |

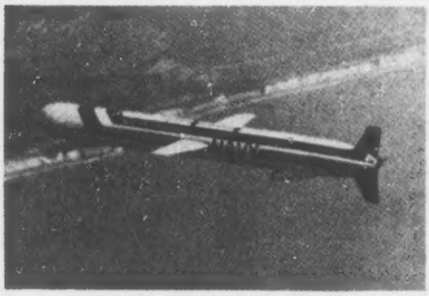
AS OF 1 JANUARY 1983

*CHART 3-5*

Deployment of the new NATO NSNF missiles is scheduled to begin in December 1983, and all weapons will be in place by late 1988. To meet this schedule, PERSHING II flight tests are proceeding in parallel with early production initiatives. The initial effort in the GLCM program is to plan for and construct the facilities required to base the new missile system in the five designated countries. Action is being taken to insure timely deployment.

The longer range of the GLCM allows basing far from the potential front lines, thus reducing its susceptibility to attack. The short flight time of PERSHING II will enable more rapid response to time-urgent threats. The extreme accuracy of both weapons makes them effective against virtually any target even though the missiles carry small yield warheads. Both PERSHING II and GLCM will aid in deterring war in Europe by providing a credible threat to targets throughout Eastern Europe and the western portions of the Soviet Union.

Nuclear-capable Sea-Launched Cruise Missiles (SLCM) will be deployed aboard attack submarines and selected surface ships beginning in FY 1984. The TOMAHAWK Nuclear Land Attack Missile, is expected to achieve initial operational capability in FY 1984. Attack submarines will be able to fire SLCMs through torpedo tubes and, in some cases, through a vertical launch system.



TOMAHAWK CRUISE MISSILE

Along with improvements to NSNF missiles, modernization programs have been initiated to improve short-range NSNF weapons. The W79 203mm (8 inch) and W82 155mm nuclear artillery projectiles will replace older munitions. Both provide more reliable weapons security and safety features, more accurate fuzing, higher yields, and longer ranges (50 percent and 100 percent respectively) than their older counterparts. Since two-thirds of NATO's short-range nuclear capability is 155mm artillery, the new W82 warhead is vital to the modernization of the short-range nuclear force. The W79 entered production in 1982.

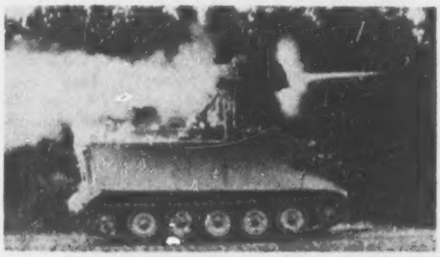
**Conventional Forces**

To counter the Warsaw Pact's gains in conventional forces, the US is pursuing force improvements which involve development of new weapon systems and modification of selected existing equipment. A key element of this modernization effort involves coordinated programs with our allies to replace obsolete weapon systems. Advanced technology is being exploited to produce a force mix capable of greater mobility and more accurate and longer-range firepower.

Ground/Amphibious Forces

*Antiarmor Weapons*

The present generation of antiarmor weapons includes the TOW (long-range), DRAGON (medium-range), and light antitank weapon (LAW) (short-range) missiles. The TOW, which can be fired from the ground, helicopters, tracked vehicles, or tactical wheeled vehicles, is the main guided antitank weapon of the Army and Marine Corps. Improved warheads and guidance systems will increase the TOW's ability to penetrate new Soviet armor and to operate in conditions of poor visibility and against electro-optical guidance countermeasures.



IMPROVED TOW VEHICLE (ITV)

Since the DRAGON is not lethal against the most modern Soviet armor, the Army will replace it with RATTLER, a more capable, man-portable, antiarmor missile system. RATTLER may also be fielded by the UK, France, and the FRG to replace the European MILAN, thereby implementing a tentative agreement to divide responsibility for development of third generation antiarmor weapons.

By the end of FY 1988, the Army is scheduled to have over 1,500 attack helicopters, two-thirds of which will be the AH-1S COBRA TOW. Fifty percent of the AH-1S force has been upgraded with the addition of 20mm guns, more advanced 2.75 inch rocket subsystems, fire control computers, and survivability equipment. The Army's AH-64 APACHE helicopter, which entered production in 1982, is an advanced, quick-reaction, antitank weapon. It has a suite of aircraft protective equipment and is armed with 16 HELLFIRE antiarmor missiles, a 30mm automatic gun, and 2.75 inch rockets. When it is deployed in 1984, the APACHE will be the Army's primary attack helicopter and will be augmented by the COBRA, which is already in service.

AH-64 (APACHE) HELICOPTER

The first M1 ABRAMS main battle tanks were sent to Army field units in CONUS in 1981 and to units in Europe in 1982. As one of the most advanced tanks in the world, the M1 provides US forces with improved mobility, survivability, and antiarmor firepower. During this fall's REFORGER maneuvers in the FRG, the 174 M1s fielded there achieved a 97 percent operational readiness rate throughout the 11-day exercise. As an additional improvement, the Army plans to replace the M1 main gun with the German-designed 120mm main gun system which would be interoperable with the German LEOPARD II tank gun.

M-1 ABRAMS TANK

The Multiple-Launch Rocket System (MLRS), which is being produced in cooperation with the FRG, France, Italy and the UK, will be fielded this year. It will give NATO ground forces enhanced firepower to suppress enemy artillery and ground-based air defense weapons and introduce a new capability to interdict enemy operations beyond normal artillery range. The MLRS may also incorporate a terminal guidance warhead, which can destroy tanks and other armored vehicles, and a chemical warhead.

MULTIPLE-LAUNCH ROCKET SYSTEM (MLRS)

Marine Corps artillery battalions will gain increased kill capability and range with the M198 which is a 155mm towed howitzer. This weapon will replace the 105mm and older towed 155mm howitzers. With the formation of three target acquisition batteries by FY 1988, artillery counterbattery fire will be greatly improved.

The M2 and M3 BRADLEY Fighting Vehicles, which were introduced in 1981, are modernizing Army mechanized forces. Both vehicles carry automatic 25mm cannons, 7.62mm coaxial machineguns, and TOW antitank weapons. The M2 and M3 are identical except for minor modifications for their infantry and cavalry missions. These vehicles give mechanized infantry a true mounted combat capability and greatly improve the ability of armored cavalry units to perform reconnaissance and security missions.

Introduction of the Light Armored Vehicle (LAV) will provide the Marine Corps and Army light infantry units with increased mobility and firepower for use against enemy ground forces. This eight-wheeled vehicle will utilize a common chassis with differing configurations to perform varied missions such as $C^3$, air defense, antitank, mortar firing, and reconnaissance. It will be armed with a new 25mm gun and will be transportable by C-130 or CH-53 aircraft.

LIGHT ARMORED VEHICLE (LAV)

The Marine Corps Assault Amphibian Vehicle (AAV) provides ship-to-shore movement during amphibious operations and armored mobility for subsequent operations ashore. Improvements such as a new engine, modified fuel tank, and an enhanced weapons station will extend its service life into the 1990s. In addition, AAVs are being purchased for placement aboard the maritime pre-positioning ships.

*Air Defense*

The STINGER, with improved infrared-seeker guidance systems, is a man-portable, surface-to-air missile (SAM) system developed to replace the REDEYE. It became operational in 1981 and will eventually be standard equipment throughout the Army and Marine Corps. Two new systems, PATRIOT and the Division Air Defense Gun (SGT YORK) will increase the Army's air defense capabilities against a variety of aircraft approaching at varying altitudes. PATRIOT will replace NIKE-HERCULES and the Improved HAWK as the principal theater-level SAM for defense against aircraft at high or medium altitudes. PATRIOT will be deployed in Europe beginning in 1984. The SGT YORK will give the Army a longer-range, all-weather, higher-kill-probability weapon to protect armored and mechanized units in combat. Beginning in 1985, the SGT YORK will replace the VULCAN gun system, which can engage targets only in fair weather during daylight.

SGT YORK (DIVISION AIR DEFENSE GUN)

*Transport Helicopters*

The Army's UH-60A BLACK HAWK helicopter entered production in 1977. By the end of FY 1988 approximately 840 will have been delivered. The BLACK HAWK is a twin engine utility aircraft. It is capable of transporting an 11-man infantry squad or the M102 105mm towed howitzer and its crew. Addition of the External Stores Support System (ESSS) will increase BLACK HAWK fuel capacity, providing extended range for tactical operations and a self-deployment capability for use with rapid deployment forces.

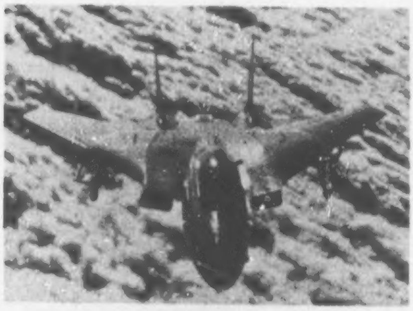
The Army's fleet of CH-47 transport helicopters will be rebuilt over the next several years. The refurbished helicopters, designated CH-47D, will have increased payload, better performance, and improved maintainability. The CH-47D will have the service life of a new helicopter, but will cost considerably less than a new airframe.

The Marine Corps is focusing its rotary wing modernization efforts on the CH-53 helicopter. With its 16-ton lift capacity, the latest version (CH-53E) is capable of moving over 90 percent of the types of combat essential equipment used by a Marine Division. The CH-53E will also be flown by the Navy and it is currently entering the fleet. The first two Marine Corps squadrons will be operational this year.

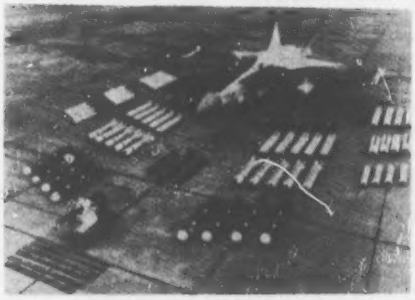
Tactical Air Forces

In tactical air warfare, several initiatives are being pursued to ensure acquisition of advanced munitions and night/adverse weather avionics for close air support and interdiction missions. Special attention is being given to equipment upgrades for both Reserve and active units.

The high performance F-14 fighter, designed for fleet air defense and air-to-air combat, is operating on more than 80 percent of the Navy's aircraft carriers. Additional procurement of this aircraft is planned. The F/A-18, which will replace the F-4 and A-7 in the Navy and Marine Corps, can accomplish both air-to-air (fighter) and air-to-ground (attack) missions. The Marine Corps AV-8B (Harrier) is scheduled to be operational by 1985, and six active light-attack squadrons will have received this new version by FY 1988. Planning continues for additional updates to the Marine Corps Air Reserve to alleviate severe aircraft shortages, reduce obsolescence, and insure compatibility with the active force.



F-14 TOMCAT FIGHTER



F/A-18 AND POTENTIAL ORDNANCE

AV-8 (HARRIER) JET

The Air Force tactical fighter force consists of 24 active and 12 Air Reserve Force wing equivalents. The force has a variety of aircraft with capabilities ranging from the A-10, for close air support, through the multirole F-16, to the F-15, designed for air superiority. The

A-10

F-15 and F-16 aircraft are receiving radar modifications to enhance air-to-air target detection ranges, provide multiple target prioritization, and utilize advanced computer software. To keep pace with the anticipated threat, both aircraft will also be modified to carry Advanced Medium-Range Air-to-Air Missiles (AMRAAM). An F-15 or F-16 variant, enhanced for nighttime, adverse weather, and extended-range operations, will be developed for the Air Force. These fighters will greatly improve the ability of US forces to fight in all weather conditions and attack distant targets, augmenting the aging F-111 force.

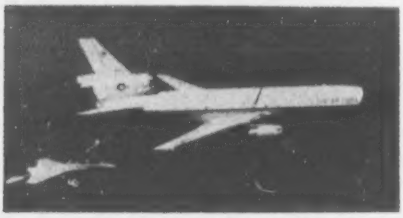
F-16

Production of F-15s and F-16s will continue into the 1990s. In the 1980s, A-10s and F-16s will be assigned to some Air National Guard and Air Force Reserve units. This is an important modernization step since one-third of the tactical air forces are assigned to the Air Reserve Forces. To expand the capabilities of the F-16 and A-10, a Low-Altitude Navigation and Targeting Infrared System for Night (LANTIRN) is being developed to improve effectiveness in the low-altitude, night-attack mission. The LANTIRN navigation pod consists of Forward Looking Infrared (FLIR) and a terrain-avoidance radar. The targeting pod consists of a laser designator and FLIR. The targeting pod can act as a designation system for on-board weapons or weapons released from another aircraft and as a targeting system for the Imaging

Infrared MAVERICK Air-To-Surface missile. Available this year, this improved MAVERICK incorporates an infrared seeker on an already proven anti-armor missile for expanded employment at night, against camouflaged targets, and in adverse weather.

### Aerial Tanker Fleet

In recognition of growing aerial tanker requirements for both strategic and tactical air forces, the tanker fleet is being modernized. Extensive improvements to KC-135s, including the installation of new engines, will increase the utility and survivability of the tanker force by permitting it to operate from shorter runways (increasing four-fold the airfields available for use), generate less noise and pollution, and carry 50 percent more fuel or cargo. Approximately 300 KC-135 modification kits will be purchased by 1988. This cost effective enhancement of equipment already in the inventory will extend KC-135 service life into the next century. Secondary to their airlift support mission, the new KC-10 tankers will provide aerial refueling to extend the mission ranges and endurance of USAF fighter aircraft. Sixty KC-10 tankers will be delivered through 1987 and an additional 12 are programmed for 1988.



KC-10 TANKER REFUELING F-15

### Maritime Forces

Naval modernization programs will emphasize a balance between new construction and present force improvements. Enhancements are planned to counter cruise missiles and their launching platforms and to neutralize Soviet surface battle groups and submarines. Standoff-range weapons and modifications in design and equipment for improved ship survivability will also be stressed.

### *Aircraft Carriers*

The US has 13 deployable aircraft carriers. This number will increase to 14 in 1987 when the nuclear-powered aircraft carrier THEODORE ROOSEVELT (CVN-71) is placed in service. Building the follow-on CVN-72 and CVN-73 carriers under a cost-saving multiship procurement program will provide two additional large deck nuclear-powered carriers. This will permit the Navy to either replace the World War II vintage carriers MIDWAY and CORAL SEA or further extend the service life of one or both of these older ships.

The eight conventional carriers of the FORRESTAL and KITTY HAWK-classes are in the last five years of their 30-year service lives. They are being rotated through an extension program which will add about 15 years of service life.

### *Surface Combatants*

The TICONDEROGA (CG-47), the first of a new class of guided missile cruisers, conducted extensive sea trials in 1982 and was commissioned in January 1983. Twenty-four of these ships will be built by the late 1980s. The TICONDEROGA will be the first ship equipped with the AEGIS antiair warfare (AAW) system.

AEGIS GUIDED MISSILE CRUISER
USS TICONDEROGA (CG-47)

AEGIS is a computerized, battle-management, fire-control system coupled to a phased-array radar. It will permit TICONDEROGA-class cruisers to engage numerous attacking aircraft and the most advanced Soviet anti-ship cruise missiles, even when faced with heavy electronic countermeasures. AEGIS can simultaneously control multiple antiair weapon systems and coordinate firing by several ships. Many surface ships are being equipped with PHALANX, an automatic self-contained weapon with a 20mm gun, radar, and digital fire control system. For individual ships, PHALANX provides fast-reaction, terminal defense against low-flying, high-speed aircraft and missiles.

With the addition of tactical towed-array sensors (TACTAS) to US frigates and destroyers, ASW capability against modern Soviet submarines will be improved. TACTAS extends the undersea "battle space." This enables ASW attack platforms to detect and engage enemy submarines beyond the edge of naval battle force formations. The procurement of Ocean Surveillance Ships, equipped with the Surveillance Towed Array Sensor System (SURTASS), will introduce the capability of positioning a sensor to detect and maintain contact with submarines in ocean basins worldwide.

The nonnuclear HARPOON antiship cruise missile is deployed aboard submarines and surface ships and is being installed on P-3 ASW aircraft and carrier-based A-6 attack aircraft. The long-range TOMAHAWK cruise missile will be fully operational for use against surface ships in 1984. The conventional land attack version (TLAM(C)) is expected to be ready in 1985. TOMAHAWK will be carried by several classes of submarines, cruisers, destroyers, and the IOWA-class battleships which are being reactivated.

BATTLESHIP NEW JERSEY (BB-62)

### *Submarine Weapons*

The MK-48 torpedo is the principal weapon for all US attack submarines. It is being modified with an improved guidance system featuring greater resistance to deceptive acoustic countermeasures. Additionally, the torpedo will be able to attack deeper and at faster speed. Known as the MK-48 ADCAP, this torpedo will be operational in 1986 and capable of countering existing and projected Soviet submarines.

### *Amphibious Lift*

The US Navy has the aggregate sealift capability in modern 20-knot ships to deploy only the assault echelon of one Marine Amphibious Force (MAF). Based on the projected ship delivery schedule, programmed forces will be able to meet the mid-term objective of a simultaneous lift of the assault echelons of a MAF and a Marine Amphibious Brigade (MAB) by the early 1990s.

The keel of WHIDBEY ISLAND, the first of the new LSD-41 class of amphibious assault ships, was laid in August 1981. This class will replace the LSD-28 class ships, which are reaching the end of their service lives. The LSD-41 will be able to operate with either conventional landing craft or the new 40-knot air-cushion landing craft (LCAC), six of which will be delivered to the fleet by 1986. In addition, the first Amphibious Assault Ship (Multi-Purpose) (LHD) is planned for delivery to the fleet in 1989. Compared to the LHA class, the LHD can transport more assault landing craft, including the LCAC, and has increased capacity for helicopters.

AMPHIBIOUS ASSAULT SHIP
(MULTIPURPOSE)

A number of recent initiatives will enhance the capability to unload ships as they arrive in areas without adequate port facilities. These initiatives include the auxiliary crane ship (TACS) to unload containerships, the auxiliary lighterage ship (TALS) to carry large watercraft and floating piers, the air cushion vehicle (LACV-30) to carry cargo from ships directly onto land, and the elevated causeway (ELCAS) to unload ships.

### *Mine Warfare*

Because of the considerable mine warfare capabilities of the Soviets and the advanced age of the US minesweeping fleet, several improvements to US mine warfare capabilities are programmed. The Navy is planning to construct two new classes of mine-countermeasures ships. The Air Force has placed renewed emphasis on the mine-laying mission of the B-52 force and is working with the Navy to refine joint operations doctrine. Although these initiatives will resolve some mine warfare discrepancies, the US will continue to rely heavily on its NATO Allies, Japan, and Korea to provide mine countermeasure forces in their regions.

RH-53 MINE-COUNTERMEASURE HELICOPTER

### Chemical and Biological Warfare Capabilities

The US has attempted to conclude an effective chemical weapons arms control agreement with the Soviet Union. However, little progress has been achieved despite intensive bilateral negotiations between 1977 and 1980. The 1979 Sverdlovsk anthrax incident in the USSR and recent use of mycotoxins and chemical weapons in Southeast Asia and Afghanistan have increased concerns regarding Soviet disregard for the 1925 Geneva Protocol and the 1972 Biological Weapons Convention.

In the absence of an effective international agreement to remove existing and future threats of CW, the US must acquire and maintain a credible CW deterrent. To deter a Soviet CW attack, the US has moved toward modernization of its CW retaliatory and protective capabilities.

Production of binary munitions would enhance US deterrent capability and improve weapons handling safety. Manufacturing could begin approximately two years after a production decision. Binary munitions which could be produced in the near term are the 155mm artillery projectile and the BIGEYE spray bomb. Future delivery systems, which could provide US forces an added range capability, include the Multiple-Launch Rocket System, Joint Tactical Missile (JTACMS), and an air-delivered standoff attack weapon.

The CW/BW defensive posture of US forces has improved over the last few years, but additional improvement is needed. The inability to conduct sustained operations could be an inducement for chemical attack against US forces. Attaining a posture allowing US forces to sustain themselves in a CW/BW environment is therefore of great importance. To meet this challenge, continuing support is required for major procurement and research and development efforts to improve US defensive capabilities. Resources programmed through FY 1988 will improve the survivability of all US units by providing the training and equipment required. In addition, increased research and development is underway to improve medical support for CW/BW casualties and to enhance individual and collective protection, decontamination, detection, and warning capabilities.

### Electronic Warfare

Warfighting effectiveness has become heavily dependent upon electronics for command and control of forces and effective weapons employment. Deception or disruption of enemy surveillance systems, weapon guidance systems, and command and control systems, while protecting US and allied electronics from similar enemy actions, is critical.

Although electronic warfare (EW) remains an area of US technical qualitative advantage, the US has not made full use of its edge. The Soviet Union has deployed a wide variety and large number of EW systems to support its doctrine of "Radio Electronic Combat." The US, however, has been slow to field the modern EW systems the electronics industry is capable of producing.

The Military Services are upgrading their EW resources to take maximum advantage of recent technology. The Army is fielding new families of heliborne, ground-based, and expendable jamming systems and target acquisition/surveillance systems. The Air Force has introduced a variety of state-of-the-art systems for countering enemy air defense $C^3$, jammers, and surface-to-air weapon systems. The Navy has deployed offensive deception devices and is beginning deployment of a reprogrammable electronic countermeasures system. The Navy also is beginning to develop communications countermeasures and is the lead Service in developing a joint Airborne Self-Protection Jammer for deployment later in the decade. The Services are also analyzing the EW lessons learned by our allies in the South Atlantic and Middle East conflicts of 1982.

### Command, Control, and Communications ($C^3$) Systems

Strategic and tactical $C^3$ planning and development require a "Total Systems" approach which encompasses a diversity of threats and friendly requirements over a range of operational conditions. These systems must adapt both to user needs and to evolutionary change. The results desired are an enhanced posture prior to hostilities and the ability to exploit battlefield advantages as they occur.

Although secure, interoperable, and survivable command and control equipment for tactical forces has developed more slowly than that provided for strategic forces, evolving programs such as the Joint Tactical Communications Program (TRI-TAC) and the Ground Mobile Forces Satellite Communications Program will improve communications between tactical commanders and field units. The equipment to support these programs has entered full-scale production. Production and fielding of the Single Channel Ground and Airborne Radio System (SINCGARS) is one example. This unit provides secure, antijam communications between ground and air units. The Position Location Reporting System, an integrated command, control, navigation, and identification system, is also progressing into full-scale production. This system will provide Army and Marine Corps tactical commanders the ability to locate, identify, and track deployed friendly forces on virtually a real time basis.

The outlook for tactical warfare command and control is optimistic. Survivability and interoperability objectives are within reach for the first time as a result of the fielding of jointly designed and modernized command, control, and communications systems.

The JCS has instituted key programs to create a common vocabulary and conceptual framework for designing and evaluating tactical and strategic $C^3$ systems. Guidance, supporting plans, and requirements for cross-service, cross-command, cross-program, and international $C^3$ have been integrated. Worldwide Communications Security (COMSEC) needs have been improved through coordination of independent COMSEC projects to insure that planning efforts will yield compatible systems in the long term. Other key initiatives are:

*Joint Program Manager for WWMCCS Information System (WIS)*

Establishment [illegible]e WWMCCS Information System (WIS) Joint Program Manager is a major initiative in improving the responsiveness, effectiveness, and survivability of selected $C^3$ systems. A plan for a new information system has been developed. It will require funding support for its implementation in the 1986-1990 timeframe. WIS will provide flexible worldwide support of command and control functions and will insure a secure, user-oriented, information system responsive to commanders' requirements.

*Joint Requirements Integration Manager (JRIM)*

The JRIM is chartered to centrally coordinate and integrate $C^3$ functional information requirements and to improve joint data processing systems compatibility and interoperability. In the near-term, JRIM activity will focus on the definition and consolidation of functional community information requirements to be used in WIS modernization. Requirements for operations planning and execution will receive major attention.

*Allied Data Systems Interoperability Agency (ADSIA)*

Significant equipment interoperability advances have been made through US participation in the ADSIA. Among these are the approval of an overall NATO Interoperability Management Plan, the integration of NATO and national military information exchange requirements into a NATO Interoperability Planning Document, and agreement on information items for the proposed NATO Tactical Data System Link 16. The United States considers ADSIA to be the focal point for the planning, development, and management of $C^3$ interoperability standards for NATO.

## MOBILITY

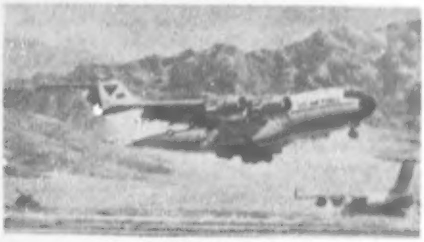
### Sealift

Rapidly developing world events do not allow time to surge shipbuilding production to meet all sealift needs. Required sealift assets must be immediately available. The Department of Defense, in conjunction with the Department of Transportation, is taking steps to improve US sealift posture. Sealift availability will be upgraded by placing the most modern, militarily usable ships from the civil sector in the Ready Reserve Fleet (RRF) — a group of ships designated for activation within 5-10 days. The RRF will be increased from 29 to 77 ships, including 61 dry-cargo ships and 16 tankers. Eight of the cargo ships will be modified to serve as Auxiliary Crane Ships designed to unload container ships.

Sealift will be further enhanced by the addition of two hospital ships, conversion of eight fast SL-7 containerships to Roll-on/Roll-off (TAKRX) configuration to deploy Army combat and support forces, and the addition of 13 Maritime Pre-positioning Ships (TAKX) to pre-position equipment for three Marine Amphibious Brigades.

### Airlift

Ongoing programs to maintain present airlift capability include C-130B/E and C-5A wing modifications to extend aircraft service life by 30,000 hours for the C-5A and between 12,000 and 22,000 hours for the different models of the C-130. Additional improvements will be realized by acquiring more spare parts to support wartime aircraft utilization rates and by procuring additional support equipment for deployment aerial ports. The procurement of 50 more C-5s, additional KC-10s, and 22 Boeing 747 equivalents of Civil Reserve Air Fleet (CRAF) enhancement could increase current 30 million-ton miles (MTM) per day airlift capability to approximately 46 MTM per day by 1989. This is still approximately 20 MTM short of minimum requirements. The installation of special cargo doors, cargo floor rollers, and stronger floors in CRAF aircraft will greatly increase their value to the military. The remaining airlift shortfall can be met by the C-17. This aircraft would provide increased intertheater lift, direct delivery to field units, intratheater outsize lift capability, and eventual replacement of the aging C-141 and C-130 force (which will reach the end of its service life in the 1990s). With regard to current airlift shortfalls, the Army's High Technology Test Bed and High Technology Light Division program is an attempt to reduce strategic airlift requirements for outsize cargo while increasing Army firepower.



PROPOSED C-17
(ARTIST'S CONCEPTION)

### Pre-Positioning

Despite the problems of pre-positioning, such as vulnerability of stocks to attack or capture and continuing maintenance requirements for stored materials, a well-managed pre-positioning program is a cost-effective way to reduce lift requirements for many theaters.

### Support Facilities

Current funding programs will increase manpower and material handling equipment to match airlift aircraft capabilities and airfield accommodations through FY 1988. Initiatives include the acquisition of wide-body aircraft handling equipment, additional manpower, and other airfield support equipment required for conducting airlift operations in remote areas as well as in the NATO area of operations.

A number of mobility enhancement programs are underway to facilitate the conduct of contingency operations. Various cargo handling facilities and support systems are being developed, including Army logistics-over-the-shore equipment and Navy Amphibious Logistic System equipment.

## JOINT DOCTRINE AND MISSION SUPPORT

Military Service capabilities have been tailored to unique service missions while contributing to the total military effort to support US national objectives. The Joint Chiefs of Staff have increased emphasis on integration of unique combat capabilities from other Services into traditional single service missions, thereby expanding total combat capability. The warfighting perspectives of the unified and specified commanders in the field are strong influences in this process as the JCS develop more comprehensive joint doctrine and new weapon systems. Major programs in progress which address joint service warfighting concepts include:

### *Intelligence Resources*

Service intelligence resources have become increasingly integrated. Much remains to be done, however, to achieve the needed interoperability and commonality. Unified command needs and detailed cross-service, cross-program planning will be the keys to providing the equipment and personnel necessary to provide the timely intelligence vital for operational decisionmaking. A DOD-wide intelligence planning effort is underway to establish requirements and priorities for improving intelligence support to the operational commanders by the late 1980s and into the 1990s.

### *Mobility*

Finding solutions to mobility shortfalls will continue to involve extensive joint planning among all four Military Services and the Joint Deployment Agency. Service cooperation on pre-positioning programs and the joint Army-Navy over-the-shore cargo discharge programs are examples of initiatives to maximize the effectiveness of scarce mobility assets.

*Interdiction*

The continuing growth of Soviet ground force capabilities has focused attention on the high payoff potential of interdicting reinforcements in second echelon, "behind-the-lines" Soviet or Soviet-supported land forces. The DOD is developing a multi-service program involving weapons, sensors, and command and control systems to attack these enemy forces at extended ranges, at night, and in adverse weather. The weapon systems involved include aircraft with direct attack and standoff munitions and indirect fire artillery and antitank missile systems with fire-and-forget capability. The Army and the Air Force are also developing a Joint Surveillance and Target Attack Radar System which provides target detection, tracking, and weapon guidance capability beyond the front lines.

*Sea Lane Defense*

Air Force E-3A aircraft and fighters are working closely with Navy carrier battle group aircraft to provide increased surveillance and interceptor coverage in the North Atlantic. Strategic Air Command B-52 aircraft are participating in the naval support missions of aerial minelaying, surveillance, and reconnaissance. Concepts for a B-52 role in interdiction of enemy shipping are under development.

## COLLECTIVE SECURITY AND SECURITY ASSISTANCE

A theme central to US foreign policy and national military strategy is the necessary commitment of America's allies and friends to share the costs and responsibilities of global security. It is not economically realistic for the US to set as an objective the unilateral defense of mutual interests throughout the Free World. Collective security spreads the costs of defense, denies an aggressor the opportunity to act against a single nation, and thus contributes to a level of mutual security which would be unattainable by independent efforts. Collective security programs also serve as an economy-of-force measure, permitting concentration of US forces in areas of greatest threat. International political-military realities call for support of friendly governments which demonstrate the will and political cohesion to contribute to their own defense, thereby ultimately contributing to enhanced US security.

### Collective Security and US Force Planning

In addition to important mutual force development and combat employment planning, access to overseas military facilities, support for pre-positioning of equipment, assistance in onward movement of arriving reinforcements, participation in protection of local SLOCs, and transit and overflight authorizations are important roles which must be filled by friendly nations and allies.

Forward deployment of US forces provides highly visible and necessary evidence of US national interest. Ship visits, military-to-military unit and personnel exchanges, pre-positioning programs, military liaison, combined exercises, and overseas security assistance organizations also contribute to furthering US influence abroad.

### Security Assistance

Security assistance programs provide unique, cost-effective opportunities to enhance government-to-government relationships and, more specifically, to contribute to an important collective deterrent to aggression.

In support of US interests, the strategic objectives of the program are as follows: (1) to assist countries vital to US national interests in preserving their independence and regional security, (2) to help secure access, overflight, transit, and forward basing rights, (3) to promote standardization and interoperability of military forces, (4) to ensure continued access to critical raw materials, and (5) to provide a vehicle for maximizing US influence abroad while minimizing that of the Soviets. Secondarily, the US security assistance program also contributes to US domestic goals by helping to expand the industrial base, lower unit costs of equipment production, maintain US employment in key industries, and improve the US balance of payments through revenue generated by foreign military sales. In addition to military equipment sales, there are three major program elements which comprise the military segment of the US security assistance program:

*Foreign Military Sales Credit Financing Program*

The Foreign Military Sales Credit Financing Program (FMSCF) furnishes guaranteed loans and direct credit to enable eligible foreign governments to purchase defense equipment, services, and training.

*The Military Assistance Program*

The Military Assistance Program (MAP) provides defense equipment and services, other than training, to eligible foreign governments on a grant basis.

*The International Military Education and Training Program*

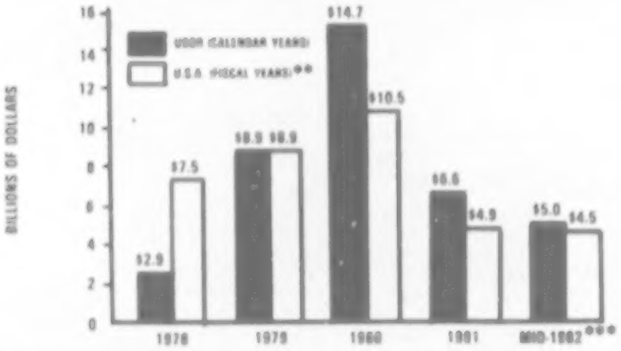
The International Military Education and Training Program (IMET) provides US military-sponsored training to foreign military and related civilian personnel on a grant basis. This training consists of formal courses, orientation tours, and on-the-job training supervised by US mobile training teams.

Although often misunderstood and dismissed as a "giveaway program," less than five percent of the nearly 22 billion dollars in FMS cash sales and funded military security assistance programs for FY 1982 was in the form of programmed grant assistance. The remainder was composed of cash FMS sales and loans which must be repaid to the United States at current market interest rates.

The United States has recently taken steps to revitalize the security assistance program by gradually increasing the level of the security assistance budget, particularly the amount of grant assistance available for countries with limited budgetary assets. Additionally, the Special Defense Acquisition Fund has been modified to enable DOD to order high usage, long-lead-time items in anticipation of future FMS needs. Further, security assistance program emphasis is shifting from a country-by-country basis to one more reflective of global and regional strategy objectives. In spite of these initiatives, inflation and the rising cost of military technology continue to make it difficult for US friends and allies to attain the defense capability to meet the security threats in their locales.

Although established mutual security relationships are important, responsiveness to new opportunities for cooperation with Third World and newly industrializing nations is also significant to US global security interests and responsibilities. The Soviet Union routinely applies a greater percentage of its security assistance budget to these nations and offers more favorable concessionary terms and fewer restrictions on foreign military sales than does the United States. Chart 3-6 provides a comparison of US and Soviet security assistance to these nations.

## U.S. AND SOVIET ARMS SALES AGREEMENTS WITH THE THIRD WORLD* (IN BILLIONS OF DOLLARS)



* THIRD WORLD EXCLUDES ALL NATO AND EUROPE, WARSAW PACT, JAPAN, AUSTRALIA, AND NEW ZEALAND.

** U.S. DATA REFLECTS GOVERNMENT TO GOVERNMENT AGREEMENTS ONLY (i.e., FMS AND MAP). COMMERCIAL SALES ARE EXCLUDED BUT COMPRISE LESS THAN $1B IN SALES TO THE THIRD WORLD FOR ANY GIVEN YEAR

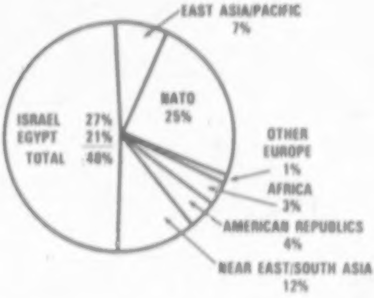
*** DUE TO DIFFERENCE IN REPORTING PERIODS (CY vs FY), COMPARATIVE DATA FOR 1982 REFLECTS INITIAL ESTIMATE FOR FIRST HALF OF REPORTING PERIOD

AS OF 1 JANUARY 1983

*CHART 3-6*

More than 50 percent of the US foreign assistance funds goes to Israel and Egypt. A total of seven countries receive over 80 percent of all foreign assistance funds. This distribution leaves little flexibility in providing security assistance to other strategically important regions of the world. The apportionment of assistance must be responsive to unplanned requirements, and should result from a continuing reassessment of worldwide priorities. Chart 3-7 presents, on a regional basis, the proposed FY 1984 security assistance budget request. This request reflects a necessary reorientation in funding and a broadening of focus in support of US national strategy.

## FY 1984 SECURITY ASSISTANCE BUDGET REQUEST



AS OF 1 JANUARY 1983 *CHART 3-7*

Additional grant aid and improved concessionary credit terms are critical to realization of US security assistance objectives. In addition, by encouraging financially capable allies to assume a more active role in cooperative regional defense efforts, limited US funds can be reallocated to more effectively support US and allied security objectives in the Third World. The full potential for security assistance contributions by all friendly arms-producing nations must be developed. Means must be sought to promote multinational equipment interoperability and more optimal use of the diminishing US industrial base if total mutual security assistance requirements are to be met. Much like alliance responsibilities, security assistance must be a combined effort.

Increases to the Special Defense Acquisition Fund from the present authorization level of 900 million dollars to 2 billion dollars will permit more economical acquisition of desired equipment and allow a more rapid response to requests from FMS customers for long-lead-time items. To maximize the foreign policy benefits of FMS, the US must be more responsive to potential FMS customers in providing rough order-of-magnitude pricing data and weapons characteristics to support long-range planning. As a cost effective alternative to buying state-of-the-art weapons, some countries could be provided technical information and materials necessary to upgrade older US equipment already in their possession. However, selectivity in making technology transfer decisions is necessary to preclude disclosures that would be counter to US interests.

Finally, funding levels should be increased for the IMET Program — possibly the most cost effective of all US security assistance programs in many regions of the world. IMET training significantly increases the probability of establishing and maintaining long-term cooperative security relationships through military-to-military contacts with nations whose interests are closely linked to those of the US. Chart 3-8 indicates the governmental positions attained by some of the foreign students who attended US senior military schools.

## FOREIGN LEADERS TRAINED IN U.S. SENIOR MILITARY SCHOOLS

| | |
|---|---|
| PRESIDENTS HEADS OF STATE | 75 |
| CABINET MINISTERS LEGISLATORS AMBASSADORS | 160 |
| CHIEFS OF STAFF | 258 |
| GENERAL FLAG RANK | 1,834 |

SOURCE DSAA SURVEY FEB 80

*CHART 3-8*

## SUMMARY

The FY 1984 Defense Budget provides for significant improvements in US military strength to address long neglected shortfalls. National support for these defense measures is vitally important in order to assure long-term improvement of US military forces. A continued commitment to this end will signal the Soviet Union, its surrogates, and our allies that the United States has the strategy, the military capability and the will to meet the global challenge. We are at a turning point, and must not falter.

# APPENDIX: SUPPLEMENTAL TOPICS

## INTRODUCTION

The foregoing assessment of the world situation from a military perspective identified major issues bearing on US deterrence and warfighting capabilities, now and in the future. This appendix supplements that discussion with a more detailed treatment of selected subjects bearing on national defense. Included are the following topics: Arms Reduction Talks and Current Negotiations, US Central Command, Manning the Force, Military Space Activity, Technology Transfer, and Special Operations Forces.

## ARMS REDUCTION TALKS AND CURRENT NEGOTIATIONS

The United States engages in both multilateral and bilateral negotiations on arms control and disarmament matters. These negotiations are designed to promote and protect US and allied security interests, contribute to global stability, and enhance favorable international relationships. In addition, an important collateral objective in these initiatives is to permit the force modernization necessary to improve US forces, while striving to limit or reduce the threat and make it more predictable.

### Strategic Arms Reduction Talks (START)

The United States and the Soviet Union commenced Strategic Arms Reduction Talks in Geneva, Switzerland on 29 June 1982. START seeks significant reductions in the most destabilizing nuclear systems — deployed land-based ballistic missiles, the number of warheads they carry, and their overall destructive potential. The Joint Chiefs of Staff representative and his advisors are active participants in the ongoing talks.

The US approach to START is based on the premise that actions to redress the strategic imbalance through necessary force development should, where feasible, be complemented by equitable and verifiable arms reductions.

### Intermediate-Range Nuclear Forces (INF) Negotiations

The United States continues to follow the agreed "dual-track" policy (force modernization coupled with negotiated arms reduction) through support of NATO's 1979 Longer-Range Intermediate-Range Nuclear Forces deployment decision and the INF arms control negotiations. During the early rounds of these talks, which began on 30 November 1981, the US has maintained that the central issue is the treatment of longer-range missiles, the systems of greatest concern to both sides. Specifically, the US proposes to cancel plans to deploy PERSHING II and GLCM in exchange for the destruction of all Soviet SS-20, SS-4, and SS-5 missiles. In this context, the NATO commitment to modernize Alliance INF creates a Soviet incentive to negotiate, provides the proper impetus for achievement of an equitable agreement, and also provides the means to redress the imbalance if a meaningful arms control agreement cannot be reached.

### Conference on Security and Cooperation in Europe (CSCE)

The second review meeting of the Conference on Security and Cooperation in Europe convened in Madrid in 1980 and is still in session after recessing from March to November 1982. CSCE is concerned with human rights and economic issues as well as security. It is intended that progress on security issues parallel progress in other areas of the negotiations to maintain the concept of balance in the CSCE process.

### Mutual and Balanced Force Reductions (MBFR)

The long-standing negotiations on Mutual and Balanced Force Reductions between NATO and the Warsaw Pact have the objective of achieving manpower parity between East and West in the Central Region, with undiminished security for both East and West. Eastern intransigence regarding the need for agreement on forces data and other key issues keeps the negotiations virtually stalemated. NATO seized the initiative by tabling, in July 1982, a draft treaty that takes a new, comprehensive approach to reducing forces to a verifiable common collective ceiling for each side. It remains now for the East to make a comparable move to help resolve the remaining obstacles that stand in the way of an agreement.

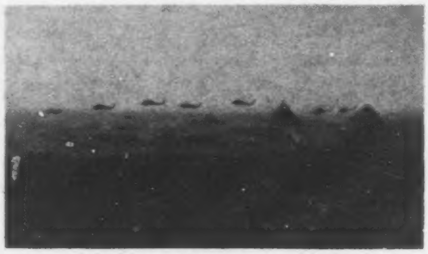
### Multilateral Negotiations

The Joint Chiefs of Staff have participated in numerous multilateral fora, including the Third United Nations Conference on the Law of the Sea and other UN and UN-related arms control and disarmament bodies. Throughout the Law of the Sea negotiations, the Department of Defense stated its vital interest in preserving US navigational and overflight freedoms, including the right of unimpeded transit on, over, and under international straits overlapped by territorial seas and archipelagic waters. Although the treaty adopted by the conference is unacceptable due to its deep-seabed mining provisions, the navigation and overflight articles represent a codification of customary international law and serve well the interest of all states.

The most prominent multilateral arms control and disarmament forum is the 40-nation Committee on Disarmament (CD). This negotiating body operates on the basis of consensus and conducts much of its substantive work through functional working groups. Achievement of a Comprehensive Ban on Nuclear Testing (CTB) and a Chemical Weapons (CW) prohibition are high on the list of CD priorities. Since the Trilateral Negotiations (US, UK, and USSR) on a CTB were suspended, there has been increased interest among some CD members in negotiation of a CTB in the CD. So long as US national strategy relies primarily on nuclear weapons to deter Soviet military actions, however, serious security concerns surround the fundamental concept of such a test ban. In addition, CD interest in a CW prohibition has intensified since the US-USSR bilateral negotiations lapsed in 1980 due to Soviet intransigence over verification issues. Although revelations of Soviet and surrogate violations of the Geneva Protocol of 1925 and the 1972 Biological Weapons Convention have heightened verification concerns, the Soviets have maintained that National Technical Means and self-inspection are adequate. An unverifiable CW ban would endanger US and allied security. An effective chemical warfare deterrent must, therefore, be reestablished and maintained until a verifiable treaty can be concluded.

## US CENTRAL COMMAND (USCENTCOM)

The President activated USCENTCOM on 1 January 1983, a command which evolved from the Rapid Deployment Joint Task Force. USCENTCOM is charged with US security interests in Southwest Asia. The Commander in Chief, USCENTCOM, has assumed all of the functions of a regional unified commander except the security assistance function, which he is scheduled to assume in the fall of this year. Among USCINCCENT's key functions is responsibility for planning for deployment and employment of designated forces in response to contingencies threatening US interests.



101ST AIRBORNE DIVISION (AIR ASSAULT)

Access to the Strait of Hormuz and the Gulf will remain crucial to allied countries for economic and military reasons in the foreseeable future. In a globally interdependent economy, a crisis such as an expansion of the Iran-Iraq War, incursion of the USSR into the region, or the closure of the Strait of Hormuz, could affect profoundly the well-being of people worldwide. Some nations of the region, torn by religious strife, tribal factionalism, and the clash of ancient ways and modernization, are inherently unstable. Tension among nations is high. Sophisticated armaments, purchased with oil revenues, are plentiful, and armed conflict could be devastatingly destructive. Opportunities exist for the USSR to expand its influence and control throughout the region. This expansionism is directed at gaining control of the region's oil supplies for its own petroleum needs, or for exercising new influence over the nations of Europe and Northeast Asia who depend on that oil. In addition, the Soviet Union could thereby achieve its goal of a warm-water port. Invasion, of course, would be but one means to these ends; the Soviet Union could pursue its objectives in the region by internal subversion and coup d'etat.

USCENTCOM is assigned an area of responsibility which previously had been divided between USEUCOM and PACOM, and is charged with overwatching vital interests in a region of special concern to the US. The mission of the USCENTCOM is to deter Soviet aggression and assist nations within the region to maintain stability. The best defense against outside aggression is a network of strong, independent, stable nations. While collective security is primarily the responsibility of nations of the region, USCENTCOM is prepared to help as it can. The formation of USCENTCOM demonstrates American resolve and serves as a signal to potential adversaries of the importance of the region to the United States.

USCINCCENT has operational command of Army, Air Force, and Naval component headquarters as well as those US forces operating or deployed in his area of responsibility. When required and authorized, USCENTCOM can also draw upon the reservoir of rapidly deployable US forces that are located primarily in the United States.

Deterrence will be improved as the US warfighting capability against the threats in SWA grows. A number of actions must be taken to strengthen US military capabilities in the region. First, early interdiction of critical targets requires tactical aircraft capable of performing long-range interdiction operations.

Second, we must improve strategic mobility. This major logistical constraint on the deployment of forces to SWA affects both the employment and sustainment of these forces. Although current pre-positioning programs such as land-based initiatives and the Near-Term Pre-positioning Force (NTPF) have alleviated the problem to some extent, heavy reliance must be placed on intercontinental airlift and sealift for support of major combat operations. Accordingly, strategic-lift programs such as the C-5B, C-17, and KC-10 aircraft and SL-7 ship programs must be supported. To further alleviate deficiencies in strategic mobility, the presence and power projection capabilities of one or more aircraft carrier battle groups provide USCENTCOM with the principal means for initially responding to hostilities that develop with little warning. Programs aimed at insuring the availability of sufficient aircraft carriers with their aircraft wings should be vigorously pursued.

Third, adequate intratheater airlift must be available to lift forces and sustaining supplies from staging areas to forward airfields. A program which calls for increased numbers of tactical airlift aircraft is necessary.

Fourth, US capabilities to conduct effective combat operations in SWA are enhanced through joint and combined exercises such as BRIGHT STAR, GALLANT KNIGHT, JADE TIGER, and GALLANT EAGLE. A continuing, fully funded, comprehensive exercise program is essential for the Command to establish credibility with allies, friends, and potential adversaries, in a region where US presence is minimal.

Fifth, the ability to fight effectively depends upon significant $C^3$ assets and infrastructure to provide essential connectivity. Presently, mission accomplishment is dependent on a tenuous $C^3$ system. Programs for antijam communications systems must be funded, and modernized, interoperable $C^3$ equipment must be issued to USCENTCOM component forces.

Lastly, upgrading of US logistics infrastructure in SWA is integral to the successful deployment and sustainment of combat forces. Diplomatic and economic initiatives which promote the achievement of these objectives are necessary to enhance the capability to deploy responsively and fight effectively in SWA.

In summary, the United States is committed to protecting its national interests in Southwest Asia. The establishment of USCENTCOM — which is focused exclusively on SWA — clearly signals the importance of this region. Although much progress has been made in acquiring the military capabilities for SWA, much more must be done to assure deterrence and strengthen regional stability. Strong US leadership, sustained support of US defense programs — in particular, strategic lift and logistic support programs — and allied and friendly cooperation are essential to meeting the challenges of this important region.

## MANNING THE FORCE

The current need for military personnel to share in the sacrifices necessary to strengthen the nation's economic recovery is recognized and accepted. However, a note of caution is imperative since precise effects on recruiting and retention occasioned by the FY 1983 pay cap and FY 1984 pay freeze are yet to be determined. Recruiting shortfalls and loss of experienced personnel, similar to those of the late 1970s, are possibilities and the Services can ill afford the long-term replacement training costs and negative impact on readiness caused by lost experience and shortage of personnel with critical skills.

Recruiting and retention programs are sensitive to the state of the economy. As the economy improves, our recruiting programs, particularly during the remainder of the 1980s will face significantly increased challenges and competition. For example, the strength of the active force is presently programmed to increase by almost 200,000 by FY 1988 while the number of 18-year old youths eligible for military service will decline. The dwindling supply of potential recruits forces a focus on retention. Programs which keep men and women in uniform — such as active duty pay, retired/retainer pay, enlistment and reenlistment bonuses, educational incentives, dependent support (particularly overseas), realistic travel and transportation entitlements, and appropriate pay levels for executives become increasingly important and must be carefully considered. A possible blueprint for improvement includes decisive action to implement a predictable, stable, pay-adjustment mechanism to assure military members that their pay will be competitive with changes in pay levels in the private sector. For equity, compensation levels must also recognize the rigors and sacrifices inherent in military service. Lack of predictability and equitable pay levels is a strong disincentive to long-term commitment to military service.

Equally important is the handling of the retired/retainer pay program, which has proven in survey after survey to be an extremely powerful retention tool. Despite its significant influence on career retention, the retirement program has come under repeated attack. Although no major restructuring of the retirement system has occurred, several changes have been made which substantially erode its value. In recent months, additional proposals have been offered that would further degrade the system. These proposals have heightened service member apprehension, and have served to reinforce the perception that retired pay is fair game for continued change, thereby causing irreparable damage to the retirement program as a retention incentive. All proposed changes to the retired/retainer pay system should be referred to the recently formed Fifth Quadrennial Review of Military Compensation which has been specifically chartered by the the President to conduct an in-depth review of the retirement system.

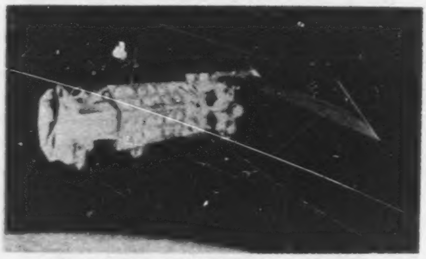
Realistic travel and transportation entitlements are needed to spare service members the burden of paying out-of-pocket expenses while accomplishing government directed business. Also germane to this discussion is pay for executives. The Executive Level Pay Cap, which has been imposed on senior military and civilian management personnel since 1972, serves as a career disincentive by prohibiting fair compensation for increased responsibility. If retained, the Executive Level Pay Cap should be tied to an appropriate index and be reviewed annually to reflect appropriate changes in the cost of living. Such a change should help attract qualified candidates for the large number of critically important top management positions which are now vacant. More, however, needs to be done. In the interest of fairness to the individual and for the good of the institution, there must be realistic compensation differentiation proportional to position and responsibility.

Another area which is critical to keeping people in the Services are programs which provide military personnel adequate living and working conditions. Programs such as housing, facilities maintenance, and military construction are all necessary components to improve working and living conditions for service members and their dependents. Additionally, special pay and bonuses, such as proficiency pay, sea pay, and selected reenlistment bonuses, provide the Services powerful and effective tools to resolve specific skills and combat arms shortages. Budget decisions reducing support for such programs have an especially severe impact on personnel. Therefore, these programs are critical in influencing an individual's career intentions.

## MILITARY SPACE ACTIVITY

Close attention to military space activity is appropriate in view of interest generated by the success of the National Aeronautics and Space Administration's space shuttle, the likelihood that the US is the only nation that can deter further Soviet militarization of space, the high costs and technological investment inherent in space systems, and the growing consensus that space systems are already critical to the execution of our combat operations plans.

Both the United States and the Soviet Union are pursuing military interests in space. The two nations use space systems for functions such as communications relay, navigation, mapping, weather, surveillance, and warning of ballistic missile attack. As a matter of national policy, the US sees the unimpeded peaceful use of space as the heritage of all nations, and believes that the US should use space systems, whenever they are the most effective means, to satisfy national and military requirements. The use of defensive space systems is consistent with this policy. Today, the most significant military activities in space consist of command and control and support of combat forces. Space systems also provide the most reliable means of communications with strategic aircraft and other forces worldwide, and are the best source of weather data needed for operations planning. Moreover, space-based precision navigation offers the near-term potential for extremely accurate terrestrial weapons delivery in a wide variety of combat environments.



DEFENSE METEOROLOGICAL SATELLITE

As an important defensive measure, the US is committed to the deployment of an antisatellite weapon to intercept Soviet satellite systems and to deter Soviet first use of their antisatellite weapon, which has been operational for over a decade. Contrary to Soviet assertions, the space shuttle system is not intended to either destroy or capture satellites of other nations. With regard to more advanced space defense systems such as spaced-based lasers and other directed-energy weapons, basic research is ongoing.

Finally, a broad program is being developed to insure that the services provided by space systems will be available for the combat forces' use when they are needed. This program includes survivability improvements for the satellites themselves, the presently unprotected ground support components, and for the other less visible elements of the system, such as launch support, personnel, logistics, and communications links. The US military space effort is expanding and its importance to our operational commanders is growing. In recognition of this, the Secretary of the Air Force established the Air Force Space Command in 1982 to improve resource management of current and future Air Force space systems.

## TECHNOLOGY TRANSFER

The importance of technology in the world's balance of power has never been as obvious as it is today. The realization that Soviet military capabilities are in part a result of technology gained from the West has been a catalyst to this awareness.

The fundamental concept that United States weapons quality will win over Soviet quantity must be reevaluated in light of the demonstrated and growing capability of the Soviet Union to field equipment of comparable quality in increasing quantity. In past years, the few technologically advanced nations were so advanced over potential adversaries that it was feasible to selectively restrict or control the global flow of technical data and goods. Today, the competition in high technology is greater than ever before, and many nations have acquired selected high technology capabilities. The rapid proliferation of such capabilities, caused largely by the speed at which goods and data can be transferred, presents a national defense challenge of such dimension that new solutions are required. Just as the discovery and detonation of the first atomic bomb revolutionized warfare and the world's balance of power, new technologies have the potential for a similar impact, and the political, economic, and military consequences of future transfers must be evaluated in this context.

The implications of just one high technology item, the microcircuit/microprocessor, found today in increasing complexity on a single silicon chip, are staggering. To maintain our lead in the application of such technology, the US must have the industrial base and security capability to develop, protect, and rapidly employ advanced technology to serve its national objectives. We should also evaluate foreign technology on a continuing basis, and if applicable, acquire it for our use.

The United States does not have a comprehensive and effective technology transfer control policy. Current initiatives, including DoD procedures for the control of international transfer of technology, goods, services, and munitions, are only beginning steps. A continuing, comprehensive program is needed to increase awareness in government, industry, academic and civilian communities on the growing role of high technology, how it relates fundamentally to the status of the United States as a world power, and the direct and indirect means the Soviets employ to acquire it. In addition, it is extremely important that protection of technology be considered in security assistance transactions.

## SPECIAL OPERATIONS FORCES (SOF)

Special Operations Forces provide the US unique and valuable capabilities in peacetime and through the spectrum of conflict. In peacetime, SOF can assist in the training of military and security forces of friendly nations and can also provide a rapid, surgical response capability when US citizens or facilities overseas are threatened by terrorists, dissidents, or the irrational acts

SPECIAL OPERATIONS FORCES

of foreign governments. In wartime, SOF can provide intelligence, conduct psychological operations, organize and lead indigenous forces behind enemy lines, and conduct direct combat operations to destroy key enemy facilities and interdict the movement of enemy forces.

US SOF units are elite, highly trained organizations. Their effectiveness can be improved through the development of joint operational doctrine, coordinated joint training, development and acquisition of interoperable specialized equipment, and selective improvements in force structure. The Joint Staff has been tasked to develop and recommend an organizational structure to improve the joint operational effectiveness of SOF.

# INDEX

A

Page

- ALCM (air-launched cruise missile) 448
- AMRAAM 276
- AN/SQR-19 108
- A-6E 280
- A-10 476
- AH-1S Cobra/TOW helicopter 454
- AH-64 (Apache) helicopter 474
- AIM-7M 276, 280
- AIM-9M 276, 280
- AIM-54A/C 280
- AV-8 Harrier 476
- AV-8B 280
- Active forces 223
- Active military manpower 203
- Advanced technology bomber 105
- Aegis guided missile carrier 477
- Aerial tankers 333
  - Fleet 477
- Africa 458
- Southern, stability 414
- Air attack, early warning 167
- Air defense 240, 335
- Air warfare overview 270
- Air Force:
  - European distribution system 405
  - Tactical aircraft 271
- Air Reserve force components to total Air Force, comparison 468
- Aircraft:
  - Carriers 477
  - Developmental 238
  - Materiel readiness 393
  - Type 272
- Airframe design life 117
- Airland battle doctrine 122
- Airlift 481
  - Improvements 320
- Airlift and sealift highlights, DOD 429
- Alliances 29
- America has paid the price 59
- Amphibious:
  - Assault forces 263
  - Ships 263
  - SLEP 264
- Andropov:
  - Counterproposal 97
  - Proposal maintaining I&F levels 107
- Anti-air warfare (AAW) forces 254
- Anti-armor:
  - Aircraft guns, 30mm 276
  - Munitions, wide area (WAAM) 277

Page

- Anti-submarine warfare (ASW):
  - Forces 258
  - Weapons 261
  - Long-range 262
  - Surveillance systems 259
- Arms:
  - Control 29, 99
    - Nuclear 175
  - Cooperation, NATO 291
  - Reduction talks 485
  - Sales, U.S. and Soviet agreements 483
  - Transfer and proliferation of technology 168
- Army Reserve components to total Army forces, comparison 468
- Artillery fire support 242
- Assault amphibian vehicle (LVT) 236
- Assault-support helicopter 238
- Attack helicopters 238
- Attack submarine program 259
- Authorization authority, seeking higher 97
- Authorization, fiscal 1984 88

B

- B-1 bomber 446
- B-52 448
- Ballistic missile:
  - Defense 336
  - Warheads 49
- Battleship reactivations 253
- Bomber(s):
  - Advanced technology 105
  - ALCM, strategic 470
  - Modernization 332
- Bomber force(s):
  - Current 333
  - Strategic 332
- Bradley fighting vehicle (BFV) 236
- Budget:
  - Breakdown, 1984 48
  - Cutting, collision course 50
  - Defense 26
  - Munitions, 1984 42
  - Shares of 19
  - Trends 178

C

- CG-47 Aegis program 256
- Caribbean basin development 413
- Carrier battle forces 252
- Central command, U.S 486
- Chaparral 240
- Chemical and biological warfare capabilities 479
- Chemical matters 199
- Chemical warfare, deterrence of 346
- Civil defense 63, 69
- Civilians in DOD 218
- Coalition strategy, foundation of U.S 436
- Combat aircraft comparison, United States vs. U.S.S.R 453
- Combat readiness and sustainability, improving 272, 273
- Command, control, and communications ($C^3$) systems 480
- Command, control, communications, and intelligence ($C^3I$) 197, 349
  - Mission area structure 351
  - Support 310
- Commercial utility and cargo vehicle (CUCV) 245
- Communications jamming 361
- Communications security (COMSEC) 247
- Conventional forces 473

Page

Conventional forces—Continued
    Modernization, 25
Cost growth problems, 88
Cost overruns, 70
Critical materials, principal suppliers, 440
Cruiser and destroyer programs, 257

D

DDG-51 program, 256
Defense:
    Ballistic missile, 336
    Budget, 26, 177
        Cuts not the answer, 41
        Faces cuts, proposed, 38
    Cost of, 434
    Deflation, 120
    How much is enough, 77
    Manpower strengths, 203
    Meteorological satellite, 488
    Outlays, U.S., added since Carter budget, comparison, 17
    Policy, foundations of, 135
    Real estate, sale of, 200
    Savings and cuts, 33
    Shares of economic aggregates, 182
    Spending, 55
        Freeze, 43
        Why the need for more, 46
Defense strategy, 24, 45
    Systems, 257
Defense Council on Integrity and Management Improvement, 195
Defense-wide:
    Information and communications systems, 362
    Support, 386
Department of Defense:
    Airlift and sealift force highlights, 429
    And total Federal outlays, 180
    Civilians in, 218
    Efforts to eliminate waste, prevent and detect fraud and abuse, 194
    General and flag officer strengths, 422
    General purpose force highlights, 428
    Manpower levels, 424
    Mobilization planning, 368
    Strategic force highlights, 427
    TOA by appropriation, 419
Deployable hospitals, 404
Deployment of U.S. divisions, 233
Depot level repair funding, 392
Destroyers, 265
Deterrent strength, achieving, 45
DIVAD, 240
Duplicating, eliminating, 100

E

E-2C, 284, 356
E-3A AWACS, 284, 355, 471
Early warning, air attack, 167
East Asia and the Pacific, 456
Economic threat, 84
Electronic:
    Jamming, 247
    Warfare, 479
    Warfare and air defense suppression capabilities, enhancing, 282
    Warfare and $C^3$ countermeasures, 359
Europe, withdrawing U.S. forces, cost of, 295
European defense, 413
European distribution system, Air Force, 405

F

Page
F-4 Phantom 449
F-14 Tomcat 279, 476
    Aircraft, requirements for 112
    Status upgrading 100
F-15 Eagle 275, 449
F-16 Fighting Falcon 275, 476
F-18 status 100
F-100 engines, savings on 79
F-106A 449
F/A-18 279, 476
FB-111 448
Federal:
    Budget trends 181
    Deficit and defense spending 183
    Mobilization planning 367
    Pay system, equality within 68
Federal, civilian, and military pay, comparisons 65
Fleet:
    Oilers 266
    Tenders 266
Force modernization 274
Force structure, readiness versus procurement 43
Frigates 265

G

General and flag officers strengths 225
Global independence 433
Goal, long-term 45
Ground forces:
    Comparison, U.S. vs. U.S.S.R 452
    Materiel readiness 394
    Readiness performance:
        Army 396
        Marine Corps 396
Ground mobile forces (GMF) satellite communications 246
Guard and Reserve(s) 37, 62
    Budgets 119

H

HH-60D Nighthawk helicopters 276
Handgun, 9 millimeter 112
Harpoon antiship missiles 254
Health and medical:
    Activities 199
    Resources 221
Health care 78
Helicopter(s):
    Attack 238
    SH-60F CV 261
    Soviet Hind-E 454
High mobility multipurpose wheeled vehicle (HMMWV) 245
Host nation support 290, 404

I

IRR Maverick 276, 280
ICBM force 329
Improved Hawk 240
Industrial mobilization activities 372
Industrial responsiveness 227
Industry, improving relations with 193
Inferiority complex 98
Information resources management 201
Intelligence program 364

Page

- Intermediate nuclear forces:
  - Aircraft, 342
  - Missiles, 341
- International programs (RDT&E), 381

J

- Joint chiefs, redesigning the, 35
- Joint doctrine and mission support, 481

K

- KC-10, 477
- KC-135 tanker, 448

L

- LAMPS MK III, 108
- LHD-1, 263
- LSD-41, 264
- Land forces, 231
- Land-based forces for sea lane defense, 255
- Landing craft, 264
- LANTIRN, 276
- Latin America, 458
- Leadership essential, strong, 46
- Leasing ships and aircraft, 84
- Lebanon, 108
  - Marines in, 86
  - Negotiating settlement, 87
- Light airborne multipurpose system, 260
- Light antitank weapon system, 236
- Light armored vehicle (LAV), 236, 475
- Lightweight torpedos, 261

M

- MC-130 Combat Talon II, 276
- MK-48 torpedos, 261
- MX:
  - Basing system, 103
  - Missile, status of, 103
- M1 Abrams tank, 235, 474
- M60A3 program, 235
- Management, 188
  - Systems improvements, 188
  - Weapons acquisition management, 189
  - Program stability, increasing, 190
- Manning the force, 487
- Manpower, 202
  - Active military, 203
  - Levels, DOD, 424
  - Mobilization actions, 371
- Marginal programs, cancellation/reduction, 116
- Marine Corps Reserve components to total Marine Corps forces, comparison, 467
- Marines in Lebanon, 86
- Maritime:
  - Balance, the, 458
  - Patrol aircraft, 260
  - Policy, 249
  - Prepositioning programs, 326
- Material disposal practices, 199
- Materiel:
  - Readiness, sustainability, and other logistics, 389
  - Sustainability, 396
- Mexico, economic problems in, 106
- Middle East, 301
  - Peace, 412

Military: Page
- Balance 444
- Investment trend:
  - By mission area 12
  - United States and Soviet 11, 142
- Mobility assets, U.S 320
- Pay 63, 83
- Pay freeze 106
- Pay increase 61
- Pay raises, zeroing out 44
- Personnel in foreign areas 426
- Posture, U.S 1, 431
- Power, measure of 56
- Production rates, who's ahead 56
- Sales and grants worldwide, U.S 408
- Schools, foreign leaders trained 484
- Space activity 488
- Spending, projected 81
- Spending, Reagan, (TOA) 53
- Strategy to meet the challenge 435
- Strategy, U.S 32
- Strength, regaining 39
- Superiority 93

Mine warfare 478
- Forces 266

Minorities as a percentage of active duty 224

Mismanagement by corporate and Pentagon 71

Mismanagement programs, penalties for defense contractors 71

Missile date, Air Force 118

Missile forces, strategic 445

Missile(s):
- Cruise, Tomahawk 253,473
- Harpoon anti-ship 254
- TOW 236

Mobility 480
- Forces 316

Mobilization 367
- Exercises 373
- Meeting personnel requirements 468
- Planning and exercises 468
- Planning, DOD 368
- Planning, Federal 367

Modern weapon systems 30

Modernization 235, 469
- Conventional force 25
- Force 274
- Nuclear force 25
- Strategic 28

Multiproduct ship 265

Munitions:
- Budget, 1984 42
- Nonstrategic 42

N

NATO (North Atlantic Treaty Organization) programs 286
- Arms cooperation 291
- Cost of U.S. commitments 123
- Improvements 123
- Related items in DOD program 127
- Spending more than Warsaw Pact 53

NATO and Warsaw Pact:
- Forces in Europe 451
- Total defense costs, comparison 58

NATO plus Japan versus Warsaw Pact 143

National Security:
- Objectives 22, 36, 73
- Policy, challenge to 149

Page

National space strategy 110
Naval forces 249
    Comparison, United States vs. U.S.S.R 455
    Structure, expansion 250
Naval Reserve components to total Naval forces, comparison 467
Navy:
    600-ship 111
    Fiscal year 1984-88 programs 251
Navy and Marine Corps 279
    Tactical aircraft 271
Nonstrategic munitions 42
Nonstrategic nuclear forces 449, 471
Nuclear:
    Arms control 175
    Bombs and warheads 47
    Forces 328, 343
        Intermediate range (INF) 485
    Modernization 25
    Programs (RDT&E) 383
    Power force, intercontinental ballistic 99
    Strategic 444
    Weapons in strategy 169
    Weapons issues 172

P

Pacific defense efforts 414
Path to the future 466
Patriot 240
Pay:
    Freeze, military 106
    Freeze regrets 66
    Increase, military 61, 63
    Raises, military, zeroing out 44
    Structure for special skills, flexibility in 95
Peacetime operating spares procurement 391
Personnel:
    Management 223
    Readiness, Active Force 209
    Turnover 215, 216
Personnel and organizational initiatives 466
Personnel and training 273
Policies, supporting 155
Polygraphs, DOD use of 114
Position location reporting system (PLRS) 247
Pratt & Whitney multiyear proposal 80
Prepositioning 324, 481
Projections, outyear 122
Procurement and procurement crunch 104
Procurement funding 82

R

RDJTF 108
Rapid deployment contingencies, combat forces for 304
Rapid deployment forces 300
    Related exercises 314
    Related facilities, military construction 312
Readiness 234
Readiness, equipment, and training 313
Readiness and personnel, progress to date 24
Readiness and support, improving 193
Readiness and sustainability 96
Recruiting 204
    Requirements 112
Research, development, test, and evaluation 375
Reserve components 217
    And mobilization planning 467

Page

- Reserve forces, selected 223
- Reserves:
  - Combat readiness of 115
  - Review of missions 115
- Retention 90
- Retention and career manning 206

S

- SH-60F CV helicopters 261
- SRAM (short range attack missile) 447
- S. 675 2
- SS-20 coverage from Soviet bases 450
- Savings/cost, summary of 5-year 126, 298
- Scenarios, summary of 125, 297
- Science and technology programs 375
- Sealift 480
  - Programs 322
- Sea-based:
  - Launch systems 469
  - Strategic nuclear forces 330
- Secretary of Defense, office of, organization 197
- Security and cooperation in Europe 485
- Security and security assistance, collective 482
- Security assistance 407
  - Budget request 484
  - By strategic objective 415
- Security objectives:
  - National 22, 36, 73
  - Threats to United States 139
- Security plans for western hemisphere 106
- Selected Reserve forces 223
- Ship materiel readiness 393, 394
- Shipbuilding program, fiscal year 1984-88 269
- Short-range air defense command and control (SHORAD $C^2$) 240
- Single-channel ground and airborne system VHF (SINCGARS-V) 247
- Small business innovative research 388
- Southwest Asia (SWA) 301, 437
  - Alinement of forces 456
  - Mission, RDF issues 304
  - Unified command for 303
- Southwest Asia and the Middle East 302
- Southwest Asia/Persian Gulf self defense and access 413
- Soviet(s):
  - T-64 tank 452
  - T-72 main battle tank 452
  - Alfa submarine 459
  - Challenge 433
  - Equipment, service life 118
  - Forces:
    - Offensive systems 445
    - Potential capabilities 145
  - Global initiatives 441
  - Global power projection 15
  - Hind-E helicopter 454
  - Maintain unrestrained growth 60
  - Military activities worldwide 442-443
  - Military buildup 34
  - Military presence, geographic expansion of 147
  - Military threat 23
  - Naval operations, geographical constraints 460
  - Production and U.S. requests, comparisons 14
  - Security assistance activities 409
  - Threat 28
  - Yankee submarine 446
- Soviet and United States arms deliveries to the Third World 409
- Space:
  - Activity, military 488

Page

- Space—Continued
  - Defense, 336
  - Strategy, national, 110
- Special operations forces (SOF), 489
- Stinger, 240
- Stock fund peacetime inventory build requirements, 392
- Stocks of equipment end items:
  - Army, 395
  - USMC, 395
- Strategic:
  - Bomber force, 332
  - Bombers/ALCM, 470
  - Command, control, and communications, 337
  - Defense, 470
  - Defensive forces, 334
  - Force highlights, DOD, 427
  - Missile forces, 445
  - Modernization, 28
    - R&D, 60
  - Nuclear forces, 444, 469
  - Offensive recapitulation, 49
  - Planning outline, 36
  - Programs, 122
  - Umbrella, United States, 93
- Strategic and nonstrategic nuclear force management, 352
- Strategy:
  - Defense, United States, 150, 151
  - Military, conventional capabilities required to implement, 160
  - Modernization, 164
  - Readiness, 161
  - Recent military events and our defense program, 167
  - Role of new technology in modernization, 166
  - Sustainability, 163
- Strategy and resources gap, 102
- Strengths and numbers, United States versus U.S.S.R, 58
- Stretchout, production rate, 113
- Strike forces, 253
- Supplemental and accompanying recissions, fiscal year 1983, 107
- Support facilities, 481
- Surface combatants, principal, 459
- Sustainability, 235

T

- TAKX build or convert and charter, 109
- TOW:
  - Missile, 236
  - Vehicle, improved, 473
- TR-1, 284, 356
- Tactical:
  - Air forces, 270, 475
    - Structure, 270
  - Aircraft modifications, 277, 280
  - Aircraft, Navy/Marine Corps, 271
  - Communications and electronic intelligence, 246
  - Force, Air Force, 271
  - Intelligence, 247
- Tactical and support vehicles, 245
- Tank, Soviet:
  - T-64, 452
  - T-72, 452
- Target acquisition, surveillance, warning, and reconnaisance capabilities, improving, 284
- Tax cut, postponing, 43
- Technology, arms transfer and proliferation of, 168
- Technology transfer, 379, 489
- Test and evaluation (T&E), 384
- Theater nuclear weapons, 28

Page

- Threat:
  - Economic 84
  - Warning 361
- Tomahawk sea-launched cruise missile (SLCM) system 109, 253, 473
- Transportation and traffic management 403
- Truck:
  - 5-ton 245
  - 10-ton 245

U

- United States and Soviet:
  - Arms sales agreements 483
  - Combat aircraft comparison 453
  - Ground forces comparison 452
  - Military investment trends 11, 142
  - Naval aircraft trends 459
  - Naval forces comparison 455
  - Strengths and numbers 58
- U.S. forces:
  - Summary assessment 461
  - Withdrawing from Europe, cost of 295
- Unconventional warfare forces 62

W

- War, deterring 102
- Warfare:
  - Capabilities, chemical and biological 479
  - Chemical, deterrence of 346
  - Electronic 479
  - Forces:
    - Mine 266, 478
    - Unconventional 62
- Warheads:
  - Ballistic missile 49
  - Status of enhanced radiation 121
- Waste, fraud, and abuse 80
- Weapon(s):
  - Duplication, eliminating 31
  - Increased pay over 69
  - Performance and tactics 168
  - Production of selected, 1974-82 13, 144
  - Support of new 110
  - System cost estimate 114
  - Systems, modern 30
  - Theater nuclear 28
- Withdrawals, cost impact 299
- Women in the military 223
  - Enlisted, active duty 225
- World stability, threats to 148
- Worldwide war, meeting long term goals 101